



FCC RF Test Report

APPLICANT : Motorola Mobility, LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola Mobility, LLC
MODEL NAME : 3584
FCC ID : IHDT56PK1
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Jun. 20, 2014 and testing was completed on Aug. 05, 2014. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

SPORTON INTERNATIONAL INC.
TEL : 886-3-327-3456
FAX : 886-3-328-4978
FCC ID : IHDT56PK1

Page Number : 1 of 147
Report Issued Date : Aug. 08, 2014
Report Version : Rev. 01



TABLE OF CONTENTS

REVISION HISTORY	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant	5
1.2 Manufacturer	5
1.3 Feature of Equipment Under Test	5
1.4 Product Specification of Equipment Under Test	6
1.5 Modification of EUT	6
1.6 Testing Location	7
1.7 Applicable Standards	7
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	8
2.1 Carrier Frequency Channel	9
2.2 RF Power	10
2.3 Test Mode	16
2.4 Connection Diagram of Test System	20
2.5 Support Unit used in test configuration and system	21
2.6 EUT Operation Test Setup	21
2.7 Measurement Results Explanation Example	21
3 TEST RESULT	22
3.1 26dB & 99% Occupied Bandwidth Measurement	22
3.2 Maximum Conducted Output Power Measurement	31
3.3 Power Spectral Density Measurement	38
3.4 Unwanted Radiated Emission Measurement	45
3.5 AC Conducted Emission Measurement	138
3.6 Frequency Stability Measurement	142
3.7 Automatically Discontinue Transmission	144
3.8 Antenna Requirements	145
4 LIST OF MEASURING EQUIPMENTS	146
5 UNCERTAINTY OF EVALUATION	147



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR462024E	Rev. 01	Initial issue of report	Aug. 08, 2014



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 15.403(i)	26dB Bandwidth	-	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	$\leq 17, 24, 30$ dBm (depend on band)	Pass	-
3.3	15.407(a)	Power Spectral Density	$\leq 4, 11, 17$ dBm (depend on band)	Pass	-
3.4	15.407(b)	Unwanted Emissions	$\leq -17, -27$ dBm (depend on band)&15.209(a)	Pass	Under limit 0.13 dB at 5469.520 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 11.60 dB at 0.502 MHz
3.6	15.407(g)	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

Motorola Mobility, LLC

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

1.2 Manufacturer

Motorola Mobility, LLC

222 W Merchandise Mart Plaza, Suite 1800, Chicago, IL 60654, United States

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Mobile Cellular Phone
Brand Name	Motorola Mobility, LLC
Model Name	3584
FCC ID	IHDT56PK1
IMEI Code	990005110007243
EUT supports Radios application	CDMA/EV-DO/GSM/EGPRS/WCDMA/HSPA/LTE WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth v4.0 EDR/LE
HW Version	P2
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Accessory List	
AC Adapter	Brand Name : Turbo Charger (Motorola)
	Model Name : SPN5864A
Earphone	Brand Name : Motorola
	Model Name : SJYN1181B
USB Cable	Brand Name : Motorola
	Model Name : SKN6461A
Battery	Brand Name : Motorola
	Model Name : EQ40

1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5580 MHz 5660 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<5180 MHz ~ 5240 MHz> 802.11a : 14.74 dBm / 0.0298 W 802.11n HT20 : 14.64 dBm / 0.0291 W 802.11n HT40 : 15.27 dBm / 0.0337 W 802.11ac VHT20 : 14.59 dBm / 0.0288 W 802.11ac VHT40 : 15.34 dBm / 0.0342 W 802.11ac VHT80 : 9.74 dBm / 0.0094 W <5260 MHz ~ 5320 MHz> 802.11a : 14.59 dBm / 0.0288 W 802.11n HT20 : 14.46 dBm / 0.0279 W 802.11n HT40 : 15.12 dBm / 0.0325 W 802.11ac VHT20 : 14.51 dBm / 0.0282 W 802.11ac VHT40 : 15.10 dBm / 0.0324 W 802.11ac VHT80 : 10.74 dBm / 0.0119 W <5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz > 802.11a : 14.81 dBm / 0.0303 W 802.11n HT20 : 14.62 dBm / 0.0290 W 802.11n HT40 : 14.42 dBm / 0.0277 W 802.11ac VHT20 : 14.51 dBm / 0.0282 W 802.11ac VHT40 : 14.54 dBm / 0.0284 W 802.11ac VHT80 : 9.68 dBm / 0.0093 W
Antenna Type	Fixed Internal Antenna with gain 3.00 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978		
Test Site No.	Sporton Site No.		
	TH02-HY	CO05-HY	03CH06-HY

1.7 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 644545 D01 Guidance for IEEE 802.11ac and Pre-ac Device Emissions Testing v01r02.
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01
- ♦ KDB 648474 D03 Handset Wireless Chargers Battery Covers v01r02
- ♦ ANSI C63.4-2003

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.



2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38	5190	46	5230
	40	5200	48	5240
	42	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54	5270	62	5310
	56	5280	64	5320
	58	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5600 MHz and 5650-5725 MHz Band 3 (U-NII-2C)	100	5500	116	5580
	102	5510	132	5660
	104	5520	134	5670
	108	5540	136	5680
	110	5550	140	5700
	112	5560		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	144	5720	142	5710
	138	5690		

Note: The above Frequency and Channel in boldface were 802.11n HT40.



2.2 RF Power

Channel	Frequency	5GHz 802.11a Average Power (dBm) (800ns)							
		Data Rate							
		6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
CH 36	5180 MHz	14.51	14.47	14.48	14.47	14.50	14.03	13.19	11.36
CH 44	5220 MHz	14.74	14.70	14.73	14.67	14.70	14.19	13.26	11.46
CH 48	5240 MHz	14.67	14.42	14.31	14.53	14.50	13.79	12.91	11.12
CH 52	5260 MHz	14.56	14.51	14.42	14.55	14.54	13.81	12.93	11.12
CH 60	5300 MHz	14.59	14.58	14.54	14.57	14.58	14.00	13.13	11.30
CH 64	5320 MHz	14.55	14.36	14.35	14.54	14.47	13.85	12.98	11.08
CH 100	5500 MHz	14.81	14.71	14.68	14.80	14.74	14.11	13.22	11.12
CH 116	5580 MHz	14.67	14.49	14.45	14.66	14.60	14.08	13.27	11.14
CH 140	5700 MHz	13.70	13.65	13.57	13.67	13.66	13.68	12.90	11.04

Channel	Frequency	5GHz 802.11a Peak Power (dBm) (800ns)							
		Data Rate							
		6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
CH 36	5180 MHz	19.01	19.00	19.00	18.95	18.99	19.00	18.99	17.79
CH 44	5220 MHz	19.54	14.49	19.44	19.52	19.50	19.49	18.95	18.84
CH 48	5240 MHz	19.15	18.94	18.79	18.91	18.96	18.91	18.09	18.10
CH 52	5260 MHz	19.17	19.13	19.15	19.09	19.11	19.15	18.12	18.55
CH 60	5300 MHz	19.52	19.47	19.46	19.33	19.43	19.50	18.83	19.05
CH 64	5320 MHz	19.06	18.79	18.91	18.98	18.94	18.84	18.82	18.69
CH 100	5500 MHz	19.45	19.26	19.19	18.22	18.32	19.24	18.85	18.31
CH 116	5580 MHz	19.43	19.41	19.40	19.10	19.11	19.10	18.75	18.30
CH 140	5700 MHz	19.31	19.30	19.29	19.25	19.26	19.11	18.98	19.11



Channel	Frequency	5GHz 802.11n HT20 Average Power (dBm) (800ns)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
CH 36	5180 MHz	14.47	14.41	14.41	14.04	14.13	13.23	13.26	10.28
CH 44	5220 MHz	14.64	14.49	14.54	14.08	14.11	13.29	13.30	10.36
CH 48	5240 MHz	14.47	14.08	14.34	13.82	13.79	13.01	13.09	9.90
CH 52	5260 MHz	14.38	14.19	14.33	13.78	13.90	13.05	13.03	10.01
CH 60	5300 MHz	14.46	14.38	14.40	13.94	14.04	13.12	13.12	10.41
CH 64	5320 MHz	14.27	14.22	14.18	13.85	13.79	13.06	13.06	10.29
CH 100	5500 MHz	14.62	14.53	14.61	14.18	14.22	13.24	13.30	10.46
CH 116	5580 MHz	14.56	14.27	14.39	13.84	13.90	12.91	12.82	10.00
CH 140	5700 MHz	14.60	14.29	14.38	13.78	13.76	12.96	12.91	9.84

Channel	Frequency	5GHz 802.11n HT20 Peak Power (dBm) (800ns)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
CH 36	5180 MHz	19.07	19.06	19.05	19.06	19.06	19.00	19.00	17.69
CH 44	5220 MHz	19.44	19.42	19.40	19.41	19.39	18.89	19.02	18.44
CH 48	5240 MHz	19.18	18.79	18.95	18.99	18.99	18.32	18.56	18.31
CH 52	5260 MHz	19.21	19.11	19.15	19.15	19.11	18.69	18.39	18.11
CH 60	5300 MHz	19.44	19.40	19.31	19.24	19.40	18.88	18.83	18.85
CH 64	5320 MHz	19.08	19.05	18.82	18.90	19.07	19.06	18.88	18.17
CH 100	5500 MHz	19.45	19.07	19.27	19.29	19.38	18.82	18.97	18.12
CH 116	5580 MHz	19.35	19.16	19.09	19.11	19.31	18.90	19.06	17.25
CH 140	5700 MHz	19.40	19.35	19.30	19.27	19.25	19.18	19.15	17.35

Channel	Frequency	5GHz 802.11n HT40 Average Power (dBm) (800ns)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
CH 38	5190MHz	10.50	10.49	10.43	10.46	10.44	10.45	10.48	10.48
CH 46	5230MHz	15.27	15.24	15.26	14.24	14.31	13.38	13.46	10.52
CH 54	5270MHz	15.12	15.11	15.02	14.06	14.13	13.33	13.31	10.55
CH 62	5310MHz	10.37	10.36	10.32	10.33	10.30	10.35	10.33	10.34
CH 102	5510MHz	9.30	9.25	9.22	9.29	9.27	9.25	9.19	10.68
CH 110	5550MHz	14.42	14.25	14.27	14.10	14.15	13.22	13.27	10.41
CH 134	5670MHz	14.02	13.98	13.96	13.80	13.84	12.89	12.93	10.08

Channel	Frequency	5GHz 802.11n HT40 Peak Power (dBm) (800ns)							
		Data Rate							
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
CH 38	5190MHz	17.54	17.01	17.08	17.50	17.50	17.51	17.55	17.52
CH 46	5230MHz	19.36	19.29	19.25	19.18	19.21	18.38	18.32	17.93
CH 54	5270MHz	19.49	19.36	19.31	18.77	18.72	18.71	18.69	17.78
CH 62	5310MHz	17.01	16.88	16.92	17.00	16.98	17.00	17.00	17.00
CH 102	5510MHz	16.79	16.35	16.44	16.66	16.09	16.40	16.31	17.75
CH 110	5550MHz	19.21	18.99	18.94	19.11	19.04	18.84	18.92	17.49
CH 134	5670MHz	19.20	19.18	19.15	19.11	18.71	18.49	18.83	16.59



Channel	Frequency	5GHz 802.11ac VHT20 Average Power (dBm) (800ns)								
		Data Rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
CH 36	5180 MHz	14.43	14.39	14.42	13.99	14.21	13.05	13.17	10.15	9.16
CH 44	5220 MHz	14.56	14.18	14.32	13.79	13.83	12.97	12.97	10.03	8.97
CH 48	5240 MHz	14.59	14.43	14.52	14.07	14.04	13.32	13.19	10.27	9.49
CH 52	5260 MHz	14.38	14.33	14.32	14.13	14.16	13.13	13.21	10.23	9.18
CH 60	5300 MHz	14.51	14.32	14.42	14.08	14.00	13.22	13.05	10.44	9.44
CH 64	5320 MHz	14.28	14.18	14.12	14.19	14.07	13.24	13.30	10.42	9.33
CH 100	5500 MHz	14.51	14.43	14.50	14.14	14.14	13.17	13.14	10.32	9.51
CH 116	5580 MHz	14.49	14.39	14.41	13.99	14.07	13.13	13.13	9.93	9.67
CH 140	5700 MHz	14.42	14.38	14.41	14.03	14.11	13.11	13.11	10.03	9.63

Channel	Frequency	5GHz 802.11ac VHT20 Peak Power (dBm) (800ns)								
		Data Rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
CH 36	5180 MHz	19.02	18.95	18.91	18.85	18.81	18.75	18.71	18.70	18.69
CH 44	5220 MHz	19.16	19.10	19.15	19.11	19.10	19.14	19.10	18.41	17.09
CH 48	5240 MHz	19.34	19.20	19.27	19.16	19.31	18.93	18.87	18.51	17.48
CH 52	5260 MHz	19.26	19.20	19.15	19.11	19.10	19.05	19.01	19.00	18.95
CH 60	5300 MHz	19.31	19.30	19.24	19.26	19.30	18.86	18.81	18.51	17.42
CH 64	5320 MHz	19.07	19.01	18.95	18.91	18.90	19.05	19.03	19.00	18.90
CH 100	5500 MHz	19.41	18.99	19.02	19.27	19.34	18.66	18.66	18.46	17.13
CH 116	5580 MHz	19.35	19.11	19.13	19.20	19.19	19.25	19.22	19.31	19.30
CH 140	5700 MHz	19.31	19.25	19.20	19.15	19.11	19.10	19.05	19.01	19.00



Channel	Frequency	5GHz 802.11ac VHT40 Average Power (dBm) (800ns)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 38	5190MHz	10.17	10.08	10.15	10.13	10.10	10.16	10.13	10.16	9.43	8.31
CH 46	5230MHz	15.34	15.33	15.25	14.27	14.43	13.30	13.58	10.60	9.81	8.84
CH 54	5270MHz	15.10	15.07	15.07	14.03	14.04	13.21	13.47	10.55	9.74	8.69
CH 62	5310MHz	10.96	10.92	10.95	10.93	10.90	10.95	10.93	10.23	9.24	8.06
CH 102	5510MHz	10.06	9.98	10.04	10.02	9.90	10.05	10.03	10.12	9.90	8.84
CH 110	5550MHz	14.54	14.36	14.09	14.03	14.08	13.02	13.27	10.21	9.28	8.16
CH 134	5670MHz	14.42	14.26	14.05	13.97	13.97	12.96	13.23	10.17	9.20	8.08

Channel	Frequency	5GHz 802.11ac VHT40 Peak Power (dBm) (800ns)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 38	5190MHz	17.52	17.12	17.15	17.50	17.49	17.45	17.41	17.50	17.49	17.14
CH 46	5230MHz	19.33	19.28	19.25	19.22	19.19	18.19	18.36	17.93	16.22	16.88
CH 54	5270MHz	19.32	19.30	19.26	18.81	18.59	18.63	18.66	17.78	16.72	15.96
CH 62	5310MHz	18.22	17.92	17.84	18.20	18.20	18.11	18.15	18.10	17.51	17.46
CH 102	5510MHz	17.42	16.92	17.05	17.31	17.40	17.40	17.40	17.40	16.24	16.01
CH 110	5550MHz	19.19	19.10	18.99	19.05	19.06	18.95	18.91	19.09	19.03	19.00
CH 134	5670MHz	19.08	19.05	19.01	18.95	18.91	18.93	19.03	19.01	19.00	18.93



Channel	Frequency	5GHz 802.11ac VHT80 Average Power (dBm) (800ns)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 42	5210MHz	9.74	9.73	9.72	9.72	9.68	9.69	9.72	9.67	9.18	8.08
CH 58	5290MHz	10.74	10.65	10.72	10.70	10.67	10.69	10.66	10.05	9.06	7.90
CH 106	5530MHz	9.68	9.65	9.60	9.65	9.67	9.59	9.66	9.66	9.09	7.85

Channel	Frequency	5GHz 802.11ac VHT80 Peak Power (dBm) (800ns)									
		Data Rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 42	5210MHz	16.79	16.49	16.39	16.15	16.70	16.70	16.75	16.70	16.75	16.71
CH 58	5290MHz	17.89	17.10	17.09	17.88	17.87	17.88	17.87	17.86	17.73	17.24
CH 106	5530MHz	17.11	16.11	16.15	17.10	17.00	17.09	17.10	17.10	17.00	16.81



2.3 Test Mode

Investigation has been done for all channels, modulations, data rates among all 5GHz bands, and only the worst results are shown in below table and following setctions.

Test Cases				
Conducted TCs	Test Items	Mode	Data rate	Test Channel
	26dB and 99% BW Power Spectral Density	802.11a	6 Mbps	L/M/H/Straddle
		802.11n HT20	MCS0	L/M/H/Straddle
		802.11n HT40	MCS0	Band 1 & 2: L/H Band 3: L/M/H Straddle
		802.11ac VHT20	MCS0	L/M/H/Straddle
		802.11ac VHT40	MCS0	Band 1 & 2: L/H Band 3: L/M/H Straddle
		802.11ac VHT80	MCS0	M/Straddle
	20dB Occupied Bandwidth	802.11a	6 Mbps	Band 1 & 3: H Band 2: L
		802.11n HT20	MCS0	Band 1 & 3: H Band 2: L
		802.11n HT40	MCS0	Band 1 & 3: H Band 2: L
		802.11ac VHT20	MCS0	Band 1 & 3: H Band 2: L
		802.11ac VHT40	MCS0	Band 1 & 3: H Band 2: L
		802.11ac VHT80	MCS0	H
	Output Power	802.11a	6 Mbps	L/M/H
		802.11n HT20	MCS0	L/M/H
		802.11n HT40	MCS0	Band 1 & 2: L/H Band 3: L/M/H
		802.11ac VHT20	MCS0	L/M/H
		802.11ac VHT40	MCS0	Band 1 & 2: L/H Band 3: L/M/H
		802.11ac VHT80	MCS0	M
	Frequency Stability	802.11a	6 Mbps	Band 1 & 2: L/H Band 3: L/M/H

Test Cases				
Radiated TCs	Test Items	Mode	Data Rate	Test Channel
	Radiated Band Edge	802.11a	6 Mbps	L/H
		802.11n HT20	MCS0	L/H
		802.11n HT40	MCS0	L/H
		802.11ac VHT20	MCS0	L/H
		802.11ac VHT40	MCS0	L/H
		802.11ac VHT80	MCS0	M
	Radiated Spurious Emission	802.11a	6 Mbps	L/M/H/Straddle
		802.11n HT20	MCS0	L/M/H/Straddle
		802.11n HT40	MCS0	L/M/H/Straddle
		802.11ac VHT20	MCS0	L/M/H/Straddle
		802.11ac VHT40	MCS0	L/M/H/Straddle
		802.11ac VHT80	MCS0	M/Straddle
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + MP3 + USB Cable (Charging from Adapter)			
Note	The Wireless Charger Configuration was evaluated and found that EUT without the wireless power charger as the worst case test configuration for Radiated Spurious Emission.			



Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134



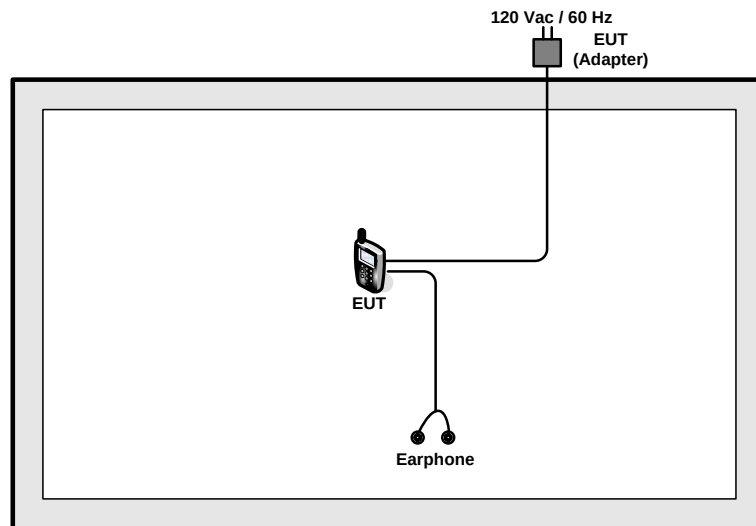
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

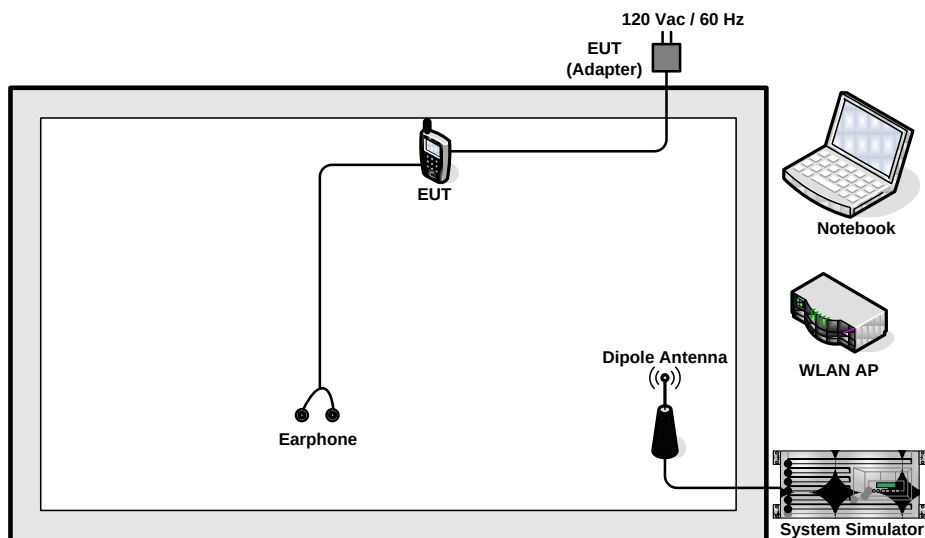
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	-
M	Middle	42	58	106
H	High	-	-	-

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
5.	CHARGER PAD	SAMSUNG	EP-P100IEWE	A3LEPP100IJWU	N/A	shielded, 1.5 m

2.6 EUT Operation Test Setup

For WLAN function, programmed RF utility, "QRCT" installed in the notebook make the EUT provide functions like channel selection and power level for continuous transmitting and receiving signals.

2.7 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 4.2 + 10 = 14.2 \text{ (dB)}
 \end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, U-NII procedures were applied for operations in the frequency band in accordance with FCC KDB 644545 D01.

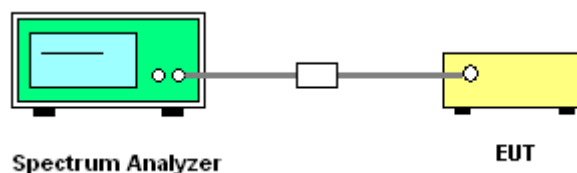
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.
Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



**3.1.5 Test Result of 26dB & 99% Occupied Bandwidth Plots**

Test Band :	5GHz band 1	Temperature :	21~23℃
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	99% Bandwidth (MHz)		IC 99% Bandwidth EIRP Limit (dBm)	
11a	6Mbps	1	36	5180	16.95		22.29	
11a	6Mbps	1	44	5220	17.05		22.32	
11a	6Mbps	1	48	5240	17.10		22.33	
HT20	MCS0	1	36	5180	18.00		22.55	
HT20	MCS0	1	44	5220	18.05		22.56	
HT20	MCS0	1	48	5240	18.15		22.59	
HT40	MCS0	1	38	5190	36.20		23.01	
HT40	MCS0	1	46	5230	37.30		23.01	
VHT20	MCS0	1	36	5180	18.00		22.55	
VHT20	MCS0	1	44	5220	18.05		22.56	
VHT20	MCS0	1	48	5240	18.05		22.56	
VHT40	MCS0	1	38	5190	36.10		23.01	
VHT40	MCS0	1	46	5230	37.00		23.01	
VHT80	MCS0	1	42	5210	72.24		23.01	



Test Band :	5GHz band 2	Temperature :	21~23℃
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)
11a	6Mbps	1	52	5260	17.05	21.85	29.32	23.98
11a	6Mbps	1	60	5300	17.00	21.8	29.30	23.98
11a	6Mbps	1	64	5320	17.05	22.00	29.32	23.98
HT20	MCS0	1	52	5260	18.00	22.85	29.55	23.98
HT20	MCS0	1	60	5300	18.00	23.00	29.55	23.98
HT20	MCS0	1	64	5320	18.05	22.75	29.56	23.98
HT40	MCS0	1	54	5270	36.70	50.31	30.00	23.98
HT40	MCS0	1	62	5310	36.30	41.85	30.00	23.98
VHT20	MCS0	1	52	5260	17.95	22.40	29.54	23.98
VHT20	MCS0	1	60	5300	17.95	23.35	29.54	23.98
VHT20	MCS0	1	64	5320	18.05	22.95	29.56	23.98
VHT40	MCS0	1	54	5270	36.60	48.06	30.00	23.98
VHT40	MCS0	1	62	5310	36.20	42.03	30.00	23.98
VHT80	MCS0	1	58	5290	75.24	83.52	30.00	23.98



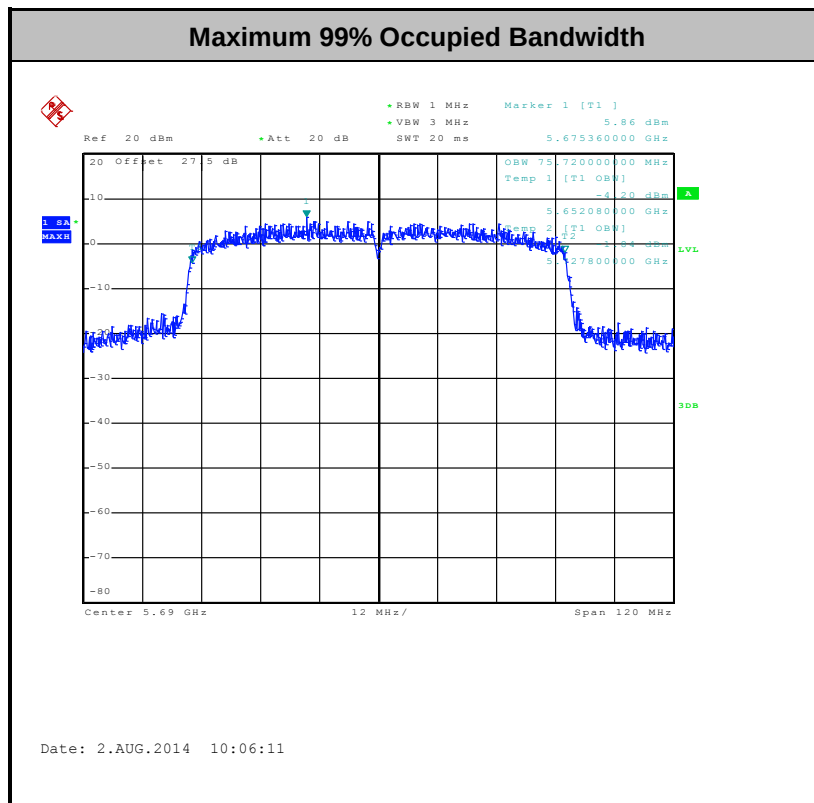
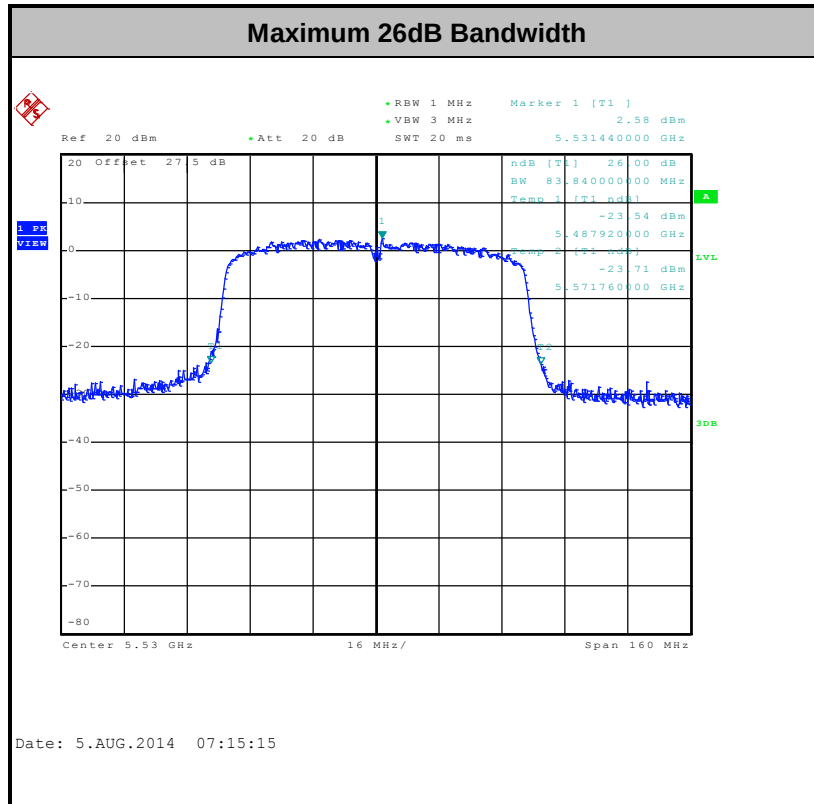
Test Band :	5GHz band 3	Temperature :	21~23℃
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)
11a	6Mbps	1	100	5500	17.05	22.15	29.32	23.98
11a	6Mbps	1	116	5580	17.05	22.65	29.32	23.98
11a	6Mbps	1	140	5700	17.00	21.50	29.30	23.98
HT20	MCS0	1	100	5500	18.00	22.55	29.55	23.98
HT20	MCS0	1	116	5580	18.10	23.45	29.58	23.98
HT20	MCS0	1	140	5700	18.05	22.85	29.56	23.98
HT40	MCS0	1	102	5510	36.20	41.67	30.00	23.98
HT40	MCS0	1	110	5550	36.50	45.09	30.00	23.98
HT40	MCS0	1	134	5670	36.40	42.93	30.00	23.98
VHT20	MCS0	1	100	5500	18.00	22.45	29.55	23.98
VHT20	MCS0	1	116	5580	18.05	23.20	29.56	23.98
VHT20	MCS0	1	140	5700	18.05	23.10	29.56	23.98
VHT40	MCS0	1	102	5510	36.30	41.94	30.00	23.98
VHT40	MCS0	1	110	5550	36.50	48.15	30.00	23.98
VHT40	MCS0	1	134	5670	36.30	42.39	30.00	23.98
VHT80	MCS0	1	106	5530	75.12	83.84	30.00	23.98



Test Band :	Straddle Channel	Temperature :	21~23°C
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	99% Bandwidth (MHz)	Emission Bandwidth (MHz)	IC 99% Bandwidth EIRP Limit (dBm)	FCC Emission Bandwidth Power Limit (dBm)
11a	6Mbps	1	144	5720	17.10	22.05	-	-
				NII-2C	13.55	15.85	28.32	23.00
				DTS	3.55	6.20	28.50	24.92
HT20	MCS0	1	144	5720	18.05	23.00	-	-
				NII-2C	14.05	16.20	28.48	23.10
				DTS	4.00	6.80	29.02	25.33
HT40	MCS0	1	142	5710	36.60	45.54	-	-
				NII-2C	33.30	37.05	30.00	23.98
				DTS	3.30	8.49	28.19	26.29
VHT20	MCS0	1	144	5710	18.05	23.20	-	-
				NII-2C	14.00	16.20	28.46	23.10
				DTS	4.05	7.00	29.07	25.45
VHT40	MCS0	1	142	5710	36.50	45.00	-	-
				NII-2C	33.30	37.05	30.00	23.98
				DTS	3.20	7.95	28.05	26.00
VHT80	MCS0	1	138	5710	75.72	92.80	-	-
				NII-2C	72.92	83.32	30.00	23.98
				DTS	2.80	9.48	27.47	26.77



**3.1.6 Test Result of 20dB Occupied Bandwidth**

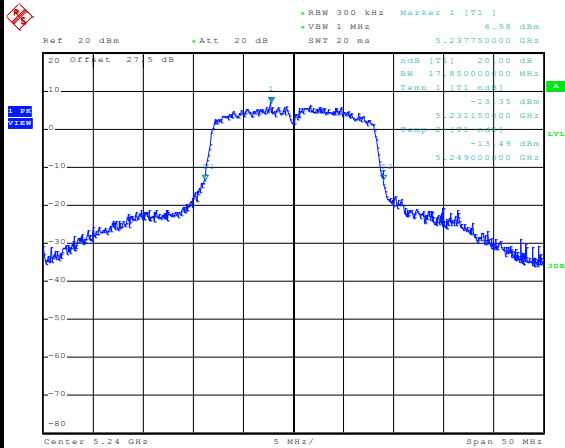
Test Band :	5GHz band 1	Temperature :	21~23℃
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	NTX	Channel	Freq. (MHz)	20dB Bandwidth (MHz)	20dB Bandwidth Upper Frequency (FH) (MHz)	Upper Limit Line (MHz)	Pass/Fail
11a	6Mbps	1	48	5240	19.80	5249.95	5250	Pass
HT20	MCS0	1	48	5240	20.15	5249.90		Pass
HT40	MCS0	1	46	5230	40.50	5249.98		Pass
VHT20	MCS0	1	48	5240	20.15	5249.90		Pass
VHT40	MCS0	1	46	5230	40.14	5249.98		Pass
VHT80	MCS0	1	42	5210	79.68	5249.84		Pass



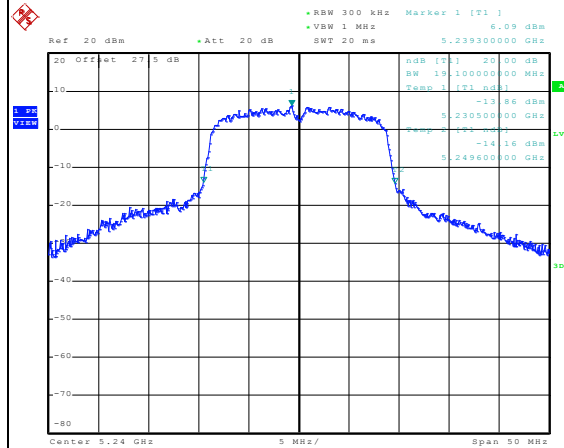
20dB Occupied Bandwidth

802.11a CH48 5240MHz



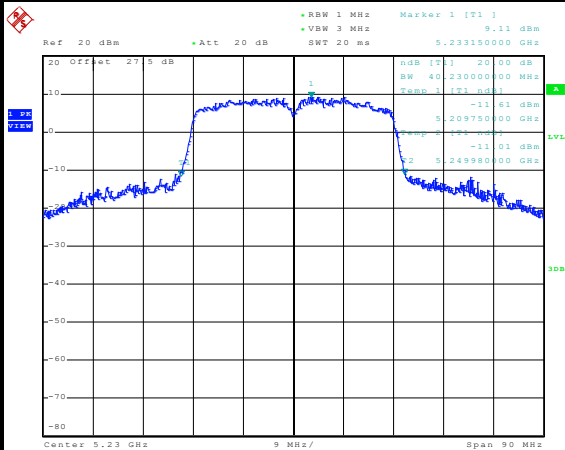
Date: 2.AUG.2014 11:45:03

802.11n HT20 CH48 5240MHz



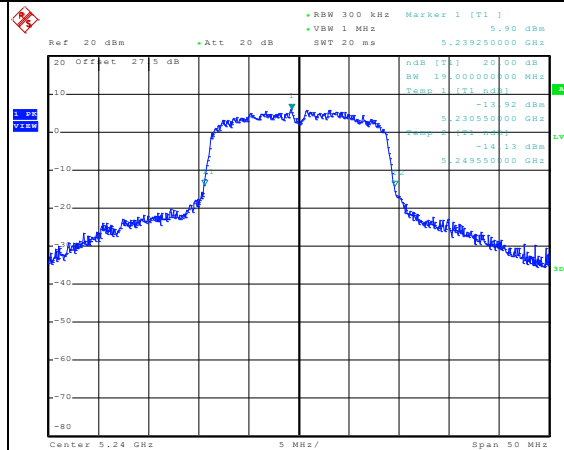
Date: 2.AUG.2014 11:44:15

802.11n HT40 CH46 5230MHz



Date: 2.AUG.2014 12:39:54

802.11ac VHT20 CH48 5240MHz

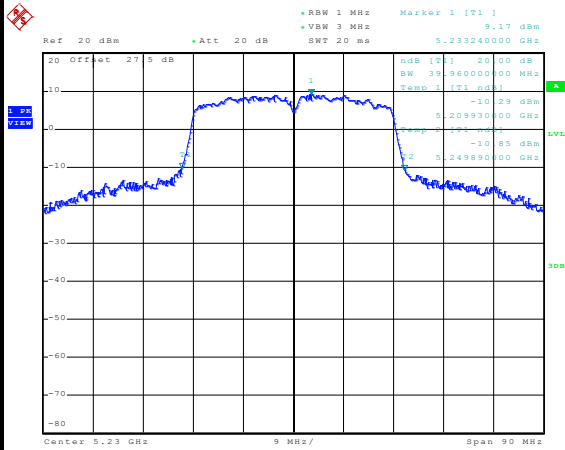


Date: 2.AUG.2014 11:47:39



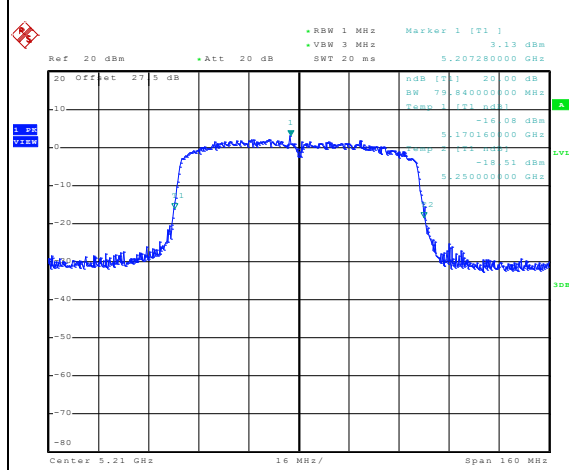
20dB Occupied Bandwidth

802.11ac VHT40 CH46 5230MHz



Date: 2.AUG.2014 13:01:53

802.11ac VHT80 CH42 5210MHz



Date: 5.AUG.2014 07:06:18



3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D01.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

Method PM (Measurement using an RF average power meter):

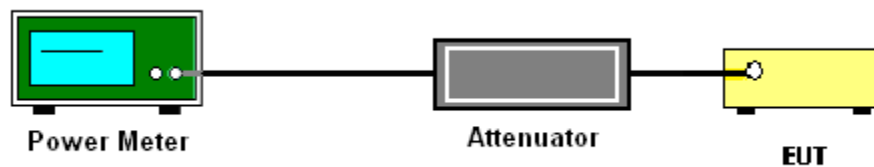
1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.

For straddle channel, the testing follows Method SA-3 (RMS detection with max hold) of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

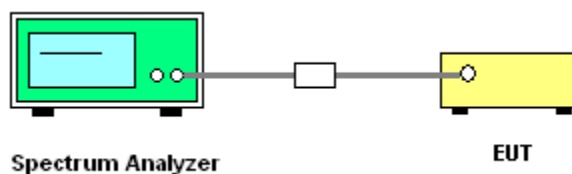
Compute power by integrating the spectrum across the 99% occupied bandwidth of the signal using the instrument's band power measurement function.

3.2.4 Test Setup

For normal channel:



For straddle channel:





3.2.5 Test Result of Maximum Conducted Output Power

Test Band :	5GHz band 1	Temperature :	21~23℃
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	36	5180	0.18	14.51	24.00	3.00		Pass
11a	6Mbps	1	44	5220	0.18	14.74	24.00	3.00		Pass
11a	6Mbps	1	48	5240	0.18	14.67	24.00	3.00		Pass
HT20	MCS0	1	36	5180	0.20	14.47	24.00	3.00		Pass
HT20	MCS0	1	44	5220	0.20	14.64	24.00	3.00		Pass
HT20	MCS0	1	48	5240	0.20	14.47	24.00	3.00		Pass
HT40	MCS0	1	38	5190	0.35	10.50	24.00	3.00		Pass
HT40	MCS0	1	46	5230	0.35	15.27	24.00	3.00		Pass
VHT20	MCS0	1	36	5180	0.20	14.43	24.00	3.00		Pass
VHT20	MCS0	1	44	5220	0.20	14.56	24.00	3.00		Pass
VHT20	MCS0	1	48	5240	0.20	14.59	24.00	3.00		Pass
VHT40	MCS0	1	38	5190	0.35	10.17	24.00	3.00		Pass
VHT40	MCS0	1	46	5230	0.35	15.34	24.00	3.00		Pass
VHT80	MCS0	1	42	5210	0.73	9.74	24.00	3.00		Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. For the band 5150-5250 MHz, the maximum average conducted output power shall not exceed 24dBm for client device for FCC.



Test Band :	5GHz band 2	Temperature :	21~23°C
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	52	5260	0.18	14.56	23.98	3.00	-	Pass
11a	6Mbps	1	60	5300	0.18	14.59	23.98	3.00		Pass
11a	6Mbps	1	64	5320	0.18	14.55	23.98	3.00		Pass
HT20	MCS0	1	52	5260	0.20	14.38	23.98	3.00		Pass
HT20	MCS0	1	60	5300	0.20	14.46	23.98	3.00		Pass
HT20	MCS0	1	64	5320	0.20	14.27	23.98	3.00		Pass
HT40	MCS0	1	54	5270	0.35	15.12	23.98	3.00		Pass
HT40	MCS0	1	62	5310	0.35	10.37	23.98	3.00		Pass
VHT20	MCS0	1	52	5260	0.20	14.38	23.98	3.00		Pass
VHT20	MCS0	1	60	5300	0.20	14.51	23.98	3.00		Pass
VHT20	MCS0	1	64	5320	0.20	14.28	23.98	3.00		Pass
VHT40	MCS0	1	54	5270	0.35	15.10	23.98	3.00		Pass
VHT40	MCS0	1	62	5310	0.35	10.96	23.98	3.00		Pass
VHT80	MCS0	1	58	5290	0.73	10.74	23.98	3.00		Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. For the 5250-5350 MHz and 5470-5600 MHz and 5650-5725 MHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log (B), where B is 26dB BW for FCC.



Test Band :	5GHz band 3	Temperature :	21~23℃
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	100	5500	0.18	14.81	23.98	3.00		Pass
11a	6Mbps	1	116	5580	0.18	14.67	23.98	3.00		Pass
11a	6Mbps	1	140	5700	0.18	13.70	23.98	3.00		Pass
HT20	MCS0	1	100	5500	0.20	14.62	23.98	3.00		Pass
HT20	MCS0	1	116	5580	0.20	14.56	23.98	3.00		Pass
HT20	MCS0	1	140	5700	0.20	14.60	23.98	3.00		Pass
HT40	MCS0	1	102	5510	0.35	9.30	23.98	3.00		Pass
HT40	MCS0	1	110	5550	0.35	14.42	23.98	3.00		Pass
HT40	MCS0	1	134	5670	0.35	14.02	23.98	3.00		Pass
VHT20	MCS0	1	100	5500	0.20	14.51	23.98	3.00		Pass
VHT20	MCS0	1	116	5580	0.20	14.49	23.98	3.00		Pass
VHT20	MCS0	1	140	5700	0.20	14.42	23.98	3.00		Pass
VHT40	MCS0	1	102	5510	0.35	10.06	23.98	3.00		Pass
VHT40	MCS0	1	110	5550	0.35	14.54	23.98	3.00		Pass
VHT40	MCS0	1	134	5670	0.35	14.42	23.98	3.00		Pass
VHT80	MCS0	1	106	5530	0.73	9.68	23.98	3.00		Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. For the 5250-5350 MHz and 5470-5600 MHz and 5650-5725 MHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log (B), where B is 26dB BW for FCC.

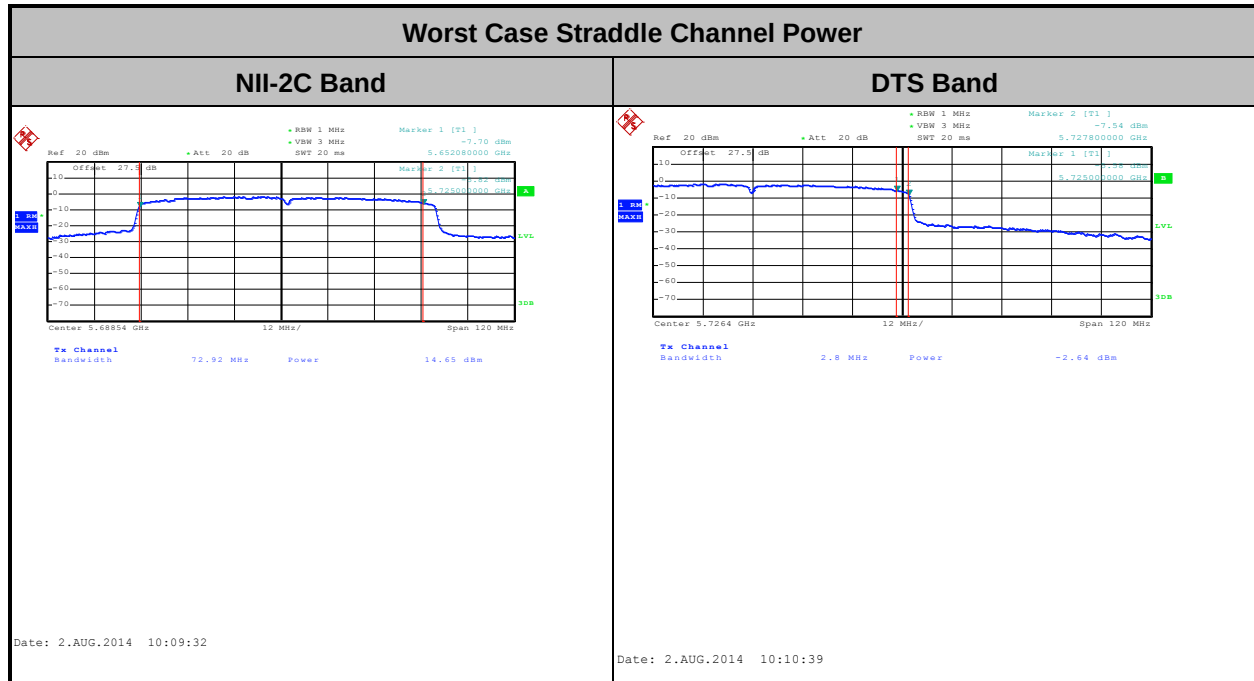


Test Band :	Straddle Channel	Temperature :	21~23°C
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	144	5720	0.18	14.48	-	3.00		Pass
				NII-2C	0.18	13.74	23.00	3.00		Pass
				NII-3	0.18	6.40	24.92	3.00		Pass
HT20	MCS0	1	144	5720	0.20	14.40	-	3.00		Pass
				NII-2C	0.20	13.61	23.10	3.00		Pass
				NII-3	0.20	6.58	25.33	3.00		Pass
HT40	MCS0	1	142	5710	0.35	14.06	-	3.00		Pass
				NII-3	0.35	13.82	23.98	3.00		Pass
				NII-3	0.35	1.41	26.29	3.00		Pass
VHT20	MCS0	1	144	5710	0.20	14.46	-	3.00		Pass
				NII-2C	0.20	13.68	23.10	3.00		Pass
				NII-3	0.20	6.59	25.45	3.00		Pass
VHT40	MCS0	1	142	5710	0.35	14.04	-	3.00		Pass
				NII-2C	0.35	13.80	23.98	3.00		Pass
				NII-3	0.35	1.26	26.00	3.00		Pass
VHT80	MCS0	1	138	5690	0.73	14.73	-	3.00		Pass
				NII-2C	0.73	14.65	23.10	3.00		Pass
				NII-3	0.73	-2.64	25.45	3.00		Pass

Note:

- Total power is a calculated result from sum of NII-2C band and DTS band.
- For NII-2C band falls into 5470-5725 MHz, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log (B), where B is 26dB BW for FCC.
- For NII-3 band falls into 5725-5825 MHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm) for FCC.





3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D01.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

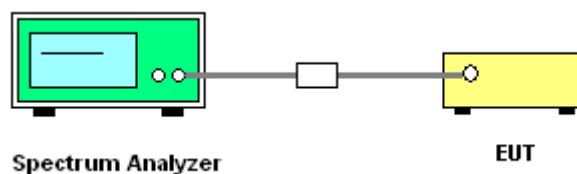
Section F) Maximum power spectral density.

Method SA-2

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
 - Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3.3.4 Test Setup



**3.3.5 Test Result of Power Spectral Density**

Test Band :	5GHz band 1	Temperature :	21~23℃
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	CH	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm)	DG (dBi)	Pass/Fail
11a	6Mbps	1	36	5180	0.18	3.47	11.00	3.00	Pass
11a	6Mbps	1	44	5220	0.18	3.28	11.00	3.00	Pass
11a	6Mbps	1	48	5240	0.18	3.22	11.00	3.00	Pass
HT20	MCS0	1	36	5180	0.20	3.16	11.00	3.00	Pass
HT20	MCS0	1	44	5220	0.20	2.82	11.00	3.00	Pass
HT20	MCS0	1	48	5240	0.20	2.84	11.00	3.00	Pass
HT40	MCS0	1	38	5190	0.35	-2.85	11.00	3.00	Pass
HT40	MCS0	1	46	5230	0.35	0.15	11.00	3.00	Pass
VHT20	MCS0	1	36	5180	0.20	2.99	11.00	3.00	Pass
VHT20	MCS0	1	44	5220	0.20	2.81	11.00	3.00	Pass
VHT20	MCS0	1	48	5240	0.20	2.66	11.00	3.00	Pass
VHT40	MCS0	1	38	5190	0.35	-3.38	11.00	3.00	Pass
VHT40	MCS0	1	46	5230	0.35	0.21	11.00	3.00	Pass
VHT80	MCS0	1	42	5210	0.73	-6.76	11.00	3.00	Pass



Test Band :	5GHz band 2	Temperature :	21~23℃
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	CH	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm)	DG (dBi)	Pass/Fail
11a	6Mbps	1	52	5260	0.18	3.27	11.00	3.00	Pass
11a	6Mbps	1	60	5300	0.18	3.38	11.00	3.00	Pass
11a	6Mbps	1	64	5320	0.18	3.40	11.00	3.00	Pass
HT20	MCS0	1	52	5260	0.20	2.81	11.00	3.00	Pass
HT20	MCS0	1	60	5300	0.20	2.88	11.00	3.00	Pass
HT20	MCS0	1	64	5320	0.20	2.88	11.00	3.00	Pass
HT40	MCS0	1	54	5270	0.35	0.21	11.00	3.00	Pass
HT40	MCS0	1	62	5310	0.35	-3.07	11.00	3.00	Pass
VHT20	MCS0	1	52	5260	0.20	2.71	11.00	3.00	Pass
VHT20	MCS0	1	60	5300	0.20	2.82	11.00	3.00	Pass
VHT20	MCS0	1	64	5320	0.20	2.87	11.00	3.00	Pass
VHT40	MCS0	1	54	5270	0.35	0.49	11.00	3.00	Pass
VHT40	MCS0	1	62	5310	0.35	-2.73	11.00	3.00	Pass
VHT80	MCS0	1	58	5290	0.73	-6.07	11.00	3.00	Pass



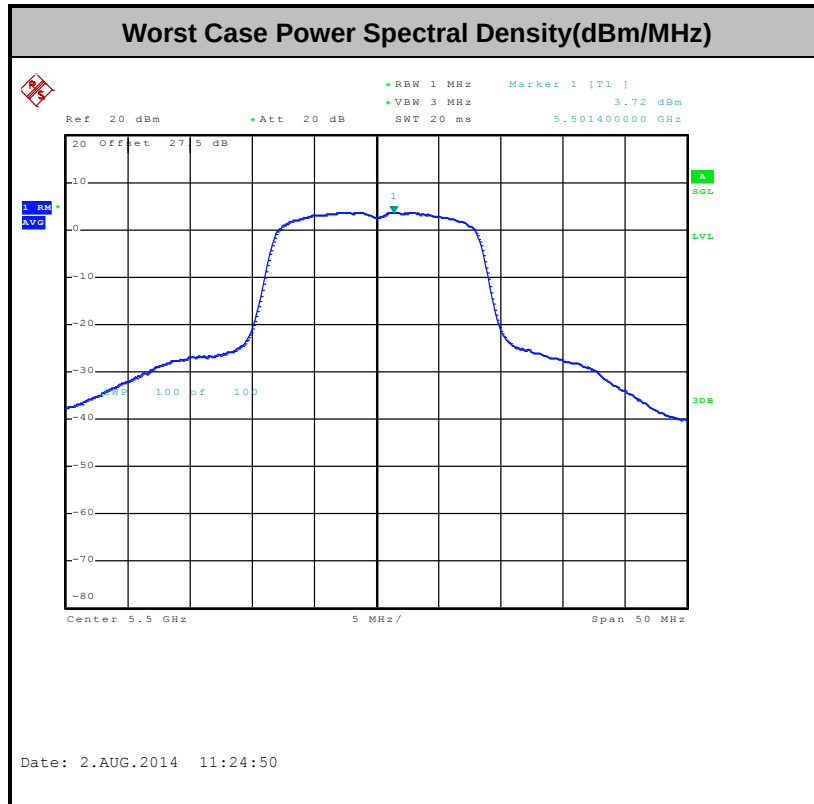
Test Band :	5GHz band 3	Temperature :	21~23°C
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	CH	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm)	DG (dBi)	Pass/Fail
11a	6Mbps	1	100	5500	0.18	3.90	11.00	3.00	Pass
11a	6Mbps	1	116	5580	0.18	3.47	11.00	3.00	Pass
11a	6Mbps	1	140	5700	0.18	3.69	11.00	3.00	Pass
HT20	MCS0	1	100	5500	0.20	3.46	11.00	3.00	Pass
HT20	MCS0	1	116	5580	0.20	2.96	11.00	3.00	Pass
HT20	MCS0	1	140	5700	0.20	2.95	11.00	3.00	Pass
HT40	MCS0	1	102	5510	0.35	-3.72	11.00	3.00	Pass
HT40	MCS0	1	110	5550	0.35	-0.35	11.00	3.00	Pass
HT40	MCS0	1	134	5670	0.35	-0.72	11.00	3.00	Pass
VHT20	MCS0	1	100	5500	0.20	3.42	11.00	3.00	Pass
VHT20	MCS0	1	116	5580	0.20	2.93	11.00	3.00	Pass
VHT20	MCS0	1	140	5700	0.20	3.00	11.00	3.00	Pass
VHT40	MCS0	1	102	5510	0.35	-3.40	11.00	3.00	Pass
VHT40	MCS0	1	110	5550	0.35	-0.31	11.00	3.00	Pass
VHT40	MCS0	1	134	5670	0.35	-0.76	11.00	3.00	Pass
VHT80	MCS0	1	106	5530	0.73	-6.46	11.00	3.00	Pass



Test Band :	Straddle Channel	Temperature :	21~23°C
Test Engineer :	Bill Kuo	Relative Humidity :	51~54%

Mod.	Data Rate	N _{TX}	CH	Band	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm)	DG (dBi)	Pass/Fail
11a	6Mbps	1	144	NII-2C	0.18	3.28	11.00	3.00	Pass
				DTS	0.18	0.18	11.00	3.00	Pass
HT20	MCS0	1	144	NII-2C	0.20	2.99	11.00	3.00	Pass
				DTS	0.20	0.20	11.00	3.00	Pass
HT40	MCS0	1	142	NII-2C	0.35	-0.40	11.00	3.00	Pass
				DTS	0.35	0.35	11.00	3.00	Pass
VHT20	MCS0	1	144	NII-2C	0.20	2.92	11.00	3.00	Pass
				DTS	0.20	0.20	11.00	3.00	Pass
VHT40	MCS0	1	142	NII-2C	0.35	-0.39	11.00	3.00	Pass
				DTS	0.35	0.35	11.00	3.00	Pass
VHT80	MCS0	1	138	NII-2C	0.73	-3.10	11.00	3.00	Pass
				DTS	0.73	0.73	11.00	3.00	Pass



Note: Average Power Density (dB) = Measured value+ Duty Factor

3.4 Unwanted Radiated Emission Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part15.205.

3.4.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (2) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \quad \mu\text{V/m, where P is the eirp (Watts)}$$

EIRP (dBm)	Field Strength at 3m (dBμV/m)
-17	78.3
- 27	68.3

KDB789033 v01 G)2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW $\geq$ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

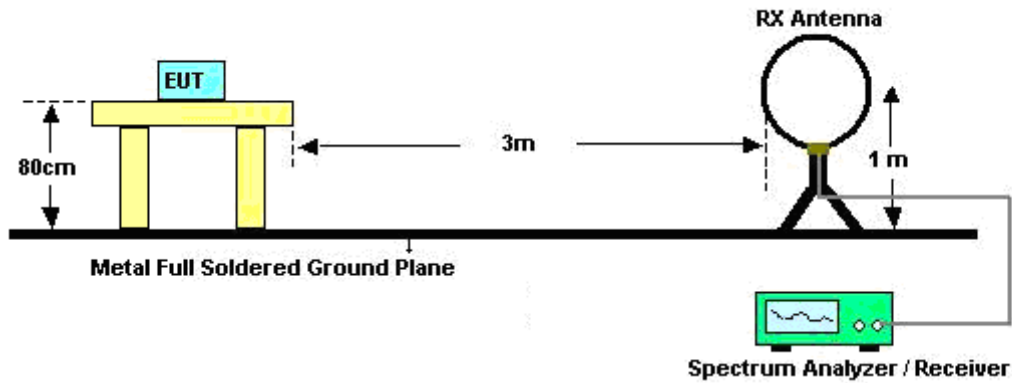
- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Band	Duty Cycle(%)	T(μ s)	1/T(kHz)	VBW Setting
802.11a	95.83	2070	0.48	1kHz
802.11n HT20	95.54	1930	0.52	1kHz
802.11n HT40	92.23	950	1.05	3kHz
802.11n VHT20	95.54	1930	0.52	1kHz
802.11n VHT40	92.31	960	1.04	3kHz
802.11n VHT80	84.62	462	2.16	3kHz

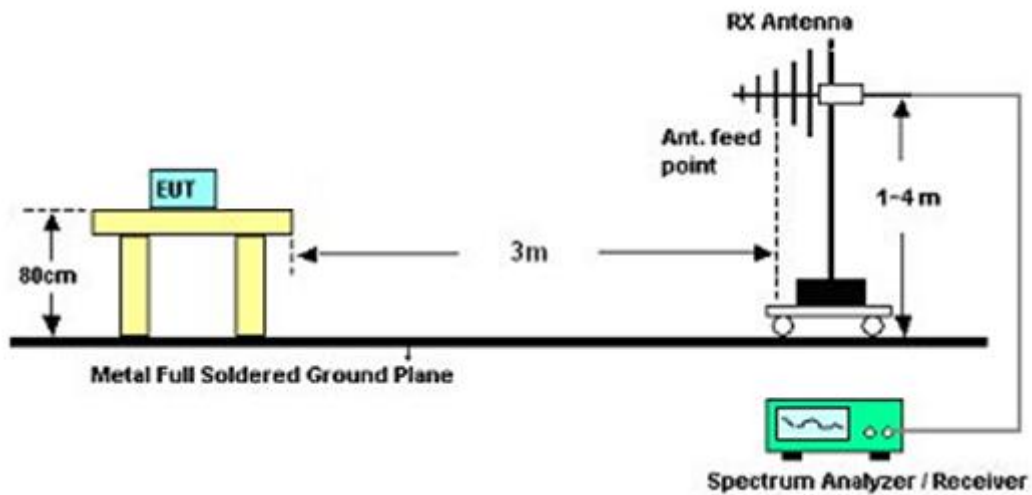
2. The EUT was placed on a rotatable table top 0.8 meter above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

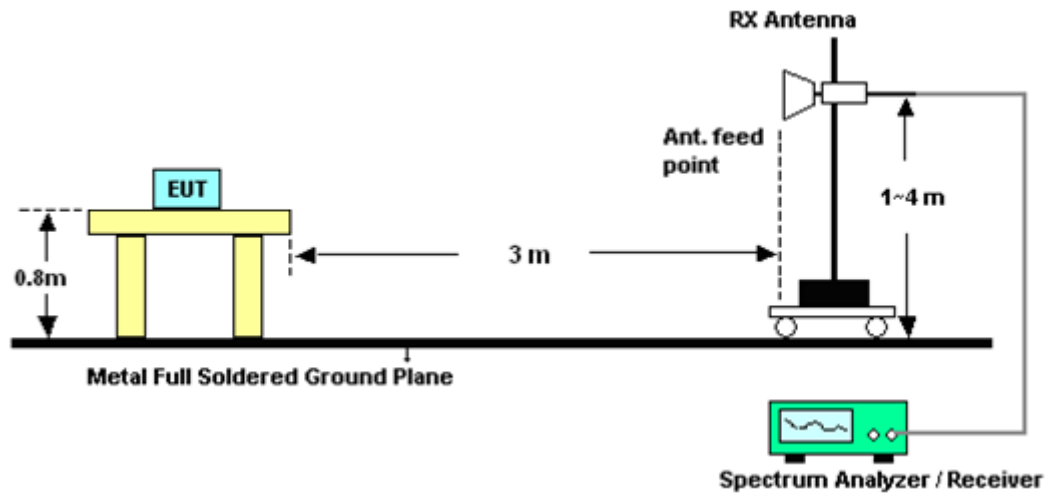
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.4.5 Test Results of Radiated Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.4.6 Test Result

3.4.6.1 Test Result of Radiated Band Edges

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.15	69.4	-4.6	74	58.5	34.45	10.44	33.99	108	2	Peak
5150	51.11	-2.89	54	40.21	34.45	10.44	33.99	108	2	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5143.55	69.46	-4.54	74	58.56	34.45	10.44	33.99	100	336	Peak
5150	50.4	-3.6	54	39.5	34.45	10.44	33.99	100	336	Average

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5076.35	54.1	-19.9	74	43.38	34.38	10.33	33.99	100	5	Peak
5148.35	43.68	-10.32	54	32.78	34.45	10.44	33.99	100	5	Average
5377.83	54.82	-19.18	74	43.37	34.68	10.75	33.98	100	5	Peak
5459.34	44.13	-9.87	54	32.47	34.75	10.89	33.98	100	5	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5134.55	54.6	-19.4	74	43.76	34.43	10.4	33.99	100	340	Peak
5148.95	43.63	-10.37	54	32.73	34.45	10.44	33.99	100	340	Average
5373.76	55.08	-18.92	74	43.64	34.67	10.75	33.98	100	340	Peak
5444.49	44.1	-9.9	54	32.49	34.73	10.86	33.98	100	340	Average



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5132.15	54.2	-19.8	74	43.36	34.43	10.4	33.99	106	358	Peak
5148.95	43.57	-10.43	54	32.67	34.45	10.44	33.99	106	358	Average
5350.66	55.01	-18.99	74	43.62	34.65	10.72	33.98	106	358	Peak
5445.59	44.07	-9.93	54	32.44	34.75	10.86	33.98	106	358	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5097.35	54.05	-19.95	74	43.27	34.4	10.37	33.99	100	340	Peak
5149.25	43.55	-10.45	54	32.65	34.45	10.44	33.99	100	340	Average
5397.85	54.88	-19.12	74	43.37	34.7	10.79	33.98	100	340	Peak
5440.31	44.05	-9.95	54	32.44	34.73	10.86	33.98	100	340	Average

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.88	70.73	-3.27	74	59.34	34.65	10.72	33.98	105	7	Peak
5350	49.09	-4.91	54	37.7	34.65	10.72	33.98	105	7	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.22	71.7	-2.3	74	60.31	34.65	10.72	33.98	100	341	Peak
5350	48.26	-5.74	54	36.87	34.65	10.72	33.98	100	341	Average



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5460.56	69.59	-4.41	74	57.93	34.75	10.89	33.98	100	22	Peak
5470	51.76	-2.24	54	40.08	34.77	10.89	33.98	100	22	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.52	73.87	-0.13	74	62.19	34.77	10.89	33.98	105	344	Peak
5470	49.35	-4.65	54	37.67	34.77	10.89	33.98	105	344	Average

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5729.24	72	-2	74	59.63	35.02	11.34	33.99	108	356	Peak
5725.08	51.51	-2.49	54	39.14	35.02	11.34	33.99	108	356	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5737	67.02	-6.98	74	54.63	35.04	11.34	33.99	100	357	Peak
5725.16	49.58	-4.42	54	37.21	35.02	11.34	33.99	100	357	Average



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5142.65	70.97	-3.03	74	60.07	34.45	10.44	33.99	108	352	Peak
5150	51.16	-2.84	54	40.26	34.45	10.44	33.99	108	352	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5145.8	70.97	-3.03	74	60.07	34.45	10.44	33.99	100	335	Peak
5150	50.33	-3.67	54	39.43	34.45	10.44	33.99	100	335	Average

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5453.73	55.09	-18.91	74	43.43	34.75	10.89	33.98	107	36	Peak
5441.96	44.11	-9.89	54	32.5	34.73	10.86	33.98	107	36	Average
5145.5	53.94	-20.06	74	43.04	34.45	10.44	33.99	107	36	Peak
5138.3	43.51	-10.49	54	32.67	34.43	10.4	33.99	107	36	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5368.7	55.13	-18.87	74	43.69	34.67	10.75	33.98	100	340	Peak
5444.6	44.1	-9.9	54	32.49	34.73	10.86	33.98	100	340	Average
5147.6	56.92	-17.08	74	46.02	34.45	10.44	33.99	100	340	Peak
5149.7	43.59	-10.41	54	32.69	34.45	10.44	33.99	100	340	Average



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5137.4	55.85	-18.15	74	45.01	34.43	10.4	33.99	108	358	Peak
5144.75	43.62	-10.38	54	32.72	34.45	10.44	33.99	108	358	Average
5405	55.49	-18.51	74	43.95	34.7	10.82	33.98	108	358	Peak
5453.51	44.13	-9.87	54	32.47	34.75	10.89	33.98	108	358	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5126.6	54.92	-19.08	74	44.08	34.43	10.4	33.99	100	338	Peak
5149.1	43.52	-10.48	54	32.62	34.45	10.44	33.99	100	338	Average
5455.6	55.73	-18.27	74	44.07	34.75	10.89	33.98	100	338	Peak
5451.75	44.15	-9.85	54	32.52	34.75	10.86	33.98	100	338	Average

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.11	72.11	-1.89	74	60.72	34.65	10.72	33.98	104	0	Peak
5350	48.86	-5.14	54	37.47	34.65	10.72	33.98	104	0	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5355.28	70.02	-3.98	74	58.63	34.65	10.72	33.98	100	339	Peak
5350.11	47.16	-6.84	54	35.77	34.65	10.72	33.98	100	339	Average



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5463.92	73.24	-0.76	74	61.56	34.77	10.89	33.98	100	12	Peak
5470	50.61	-3.39	54	38.93	34.77	10.89	33.98	100	12	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5463.76	71.41	-2.59	74	59.73	34.77	10.89	33.98	103	334	Peak
5469.84	48.79	-5.21	54	37.11	34.77	10.89	33.98	103	334	Average

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5727.24	73.36	-0.64	74	60.99	35.02	11.34	33.99	106	55	Peak
5725.08	53.67	-0.33	54	41.3	35.02	11.34	33.99	106	55	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5728.28	72.02	-1.98	74	59.65	35.02	11.34	33.99	100	22	Peak
5725	52.1	-1.9	54	39.73	35.02	11.34	33.99	100	22	Average



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	38	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.85	72	-2	74	61.1	34.45	10.44	33.99	109	334	Peak
5150	51.81	-2.19	54	40.91	34.45	10.44	33.99	109	334	Average
5435.25	55.37	-18.63	74	43.76	34.73	10.86	33.98	109	334	Peak
5458.68	44.52	-9.48	54	32.86	34.75	10.89	33.98	109	334	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5145.65	68.46	-5.54	74	57.56	34.45	10.44	33.99	100	329	Peak
5149.85	50.74	-3.26	54	39.84	34.45	10.44	33.99	100	329	Average
5441.52	55.34	-18.66	74	43.73	34.73	10.86	33.98	100	329	Peak
5366.83	54.75	-19.25	74	43.31	34.67	10.75	33.98	100	329	Average



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	46	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.7	60.71	-13.29	74	49.81	34.45	10.44	33.99	107	33	Peak
5149.55	45.15	-8.85	54	34.25	34.45	10.44	33.99	107	33	Average
5397.41	55.62	-18.38	74	44.11	34.7	10.79	33.98	107	33	Peak
5438.22	44.53	-9.47	54	32.92	34.73	10.86	33.98	107	33	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.95	60.66	-13.34	74	49.76	34.45	10.44	33.99	100	339	Peak
5149.4	45.64	-8.36	54	34.74	34.45	10.44	33.99	100	339	Average
5419.74	55.32	-18.68	74	43.76	34.72	10.82	33.98	100	339	Peak
5450.65	44.48	-9.52	54	32.85	34.75	10.86	33.98	100	339	Average



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	54	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5068.1	54.48	-19.52	74	43.77	34.37	10.33	33.99	100	36	Peak
5144.9	44.01	-9.99	54	33.11	34.45	10.44	33.99	100	36	Average
5350.55	56.65	-17.35	74	45.26	34.65	10.72	33.98	100	36	Peak
5351.1	45.92	-8.08	54	34.53	34.65	10.72	33.98	100	36	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5132	55.64	-18.36	74	44.8	34.43	10.4	33.99	100	347	Peak
5147.6	43.87	-10.13	54	32.97	34.45	10.44	33.99	100	347	Average
5354.73	64.81	-9.19	74	53.42	34.65	10.72	33.98	100	347	Peak
5350.11	48.48	-5.52	54	37.09	34.65	10.72	33.98	100	347	Average



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	62	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5145.2	54.43	-19.57	74	43.53	34.45	10.44	33.99	139	6	Peak
5148.8	44.06	-9.94	54	33.16	34.45	10.44	33.99	139	6	Average
5359.13	70.09	-3.91	74	58.67	34.65	10.75	33.98	139	6	Peak
5350	51.76	-2.24	54	40.37	34.65	10.72	33.98	139	6	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5083.7	55.11	-18.89	74	44.39	34.38	10.33	33.99	100	356	Peak
5142.2	43.97	-10.03	54	33.07	34.45	10.44	33.99	100	356	Average
5352.64	70.11	-3.89	74	58.72	34.65	10.72	33.98	100	356	Peak
5350	50.11	-3.89	54	38.72	34.65	10.72	33.98	100	356	Average



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	102	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.84	70.39	-3.61	74	58.71	34.77	10.89	33.98	100	25	Peak
5470	53.54	-0.46	54	41.86	34.77	10.89	33.98	100	25	Average
5728.6	56.14	-17.86	74	43.77	35.02	11.34	33.99	100	25	Peak
5725.32	45.44	-8.56	54	33.07	35.02	11.34	33.99	100	25	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5462	66.93	-7.07	74	55.27	34.75	10.89	33.98	104	18	Peak
5470	49.9	-4.1	54	38.22	34.77	10.89	33.98	104	18	Average
5755.88	56.11	-17.89	74	43.66	35.06	11.39	34	104	18	Peak
5740.2	45.38	-8.62	54	32.94	35.04	11.39	33.99	104	18	Average



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	134	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5449.36	55.95	-18.05	74	44.32	34.75	10.86	33.98	108	336	Peak
5446.96	44.79	-9.21	54	33.16	34.75	10.86	33.98	108	336	Average
5729.64	68.25	-5.75	74	55.88	35.02	11.34	33.99	108	336	Peak
5725.24	52.6	-1.4	54	40.23	35.02	11.34	33.99	108	336	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5419.92	55.39	-18.61	74	43.83	34.72	10.82	33.98	101	9	Peak
5463.44	44.8	-9.2	54	33.12	34.77	10.89	33.98	101	9	Average
5725	65.89	-8.11	74	53.52	35.02	11.34	33.99	101	9	Peak
5725	50.53	-3.47	54	38.16	35.02	11.34	33.99	101	9	Average



Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.65	70.91	-3.09	74	60.01	34.45	10.44	33.99	107	17	Peak
5150	51.34	-2.66	54	40.44	34.45	10.44	33.99	107	17	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.65	70.38	-3.62	74	59.48	34.45	10.44	33.99	100	337	Peak
5149.85	50.8	-3.2	54	39.9	34.45	10.44	33.99	100	337	Average

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5140.7	55.73	-18.27	74	44.83	34.45	10.44	33.99	107	18	Peak
5147	44.05	-9.95	54	33.15	34.45	10.44	33.99	107	18	Average
5350.77	56.09	-17.91	74	44.7	34.65	10.72	33.98	107	18	Peak
5445.92	44.52	-9.48	54	32.89	34.75	10.86	33.98	107	18	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.9	54.56	-19.44	74	43.66	34.45	10.44	33.99	100	342	Peak
5147.9	43.98	-10.02	54	33.08	34.45	10.44	33.99	100	342	Average
5452.85	55.29	-18.71	74	43.63	34.75	10.89	33.98	100	342	Peak
5447.02	44.47	-9.53	54	32.84	34.75	10.86	33.98	100	342	Average



Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.7	55.28	-18.72	74	44.38	34.45	10.44	33.99	108	24	Peak
5149.1	43.62	-10.38	54	32.72	34.45	10.44	33.99	108	24	Average
5354.18	55.21	-18.79	74	43.82	34.65	10.72	33.98	108	24	Peak
5434.15	44.13	-9.87	54	32.52	34.73	10.86	33.98	108	24	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5070.8	54.45	-19.55	74	43.74	34.37	10.33	33.99	100	332	Peak
5149.85	43.55	-10.45	54	32.65	34.45	10.44	33.99	100	332	Average
5408.08	56.27	-17.73	74	44.73	34.7	10.82	33.98	100	332	Peak
5436.79	44.18	-9.82	54	32.57	34.73	10.86	33.98	100	332	Average



Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.4	54.82	-19.18	74	43.92	34.45	10.44	33.99	106	49	Peak
5148.2	43.47	-10.53	54	32.57	34.45	10.44	33.99	106	49	Average
5353.63	69.63	-4.37	74	58.24	34.65	10.72	33.98	106	49	Peak
5350	47.62	-6.38	54	36.23	34.65	10.72	33.98	106	49	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5069.6	54.96	-19.04	74	44.25	34.37	10.33	33.99	100	330	Peak
5134.1	43.5	-10.5	54	32.66	34.43	10.4	33.99	100	330	Average
5350.55	70.87	-3.13	74	59.48	34.65	10.72	33.98	100	330	Peak
5350.11	46.79	-7.21	54	35.4	34.65	10.72	33.98	100	330	Average



Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5455.92	66.61	-7.39	74	54.95	34.75	10.89	33.98	100	36	Peak
5469.84	48.77	-5.23	54	37.09	34.77	10.89	33.98	100	36	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5450.8	63.16	-10.84	74	51.53	34.75	10.86	33.98	100	166	Peak
5470	46.5	-7.5	54	34.82	34.77	10.89	33.98	100	166	Average

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5726.76	71.2	-2.8	74	58.83	35.02	11.34	33.99	108	49	Peak
5725.08	52.37	-1.63	54	40	35.02	11.34	33.99	108	49	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725.32	71	-3	74	58.63	35.02	11.34	33.99	100	35	Peak
5725	51.37	-2.63	54	39	35.02	11.34	33.99	100	35	Average



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	38	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.1	71.56	-2.44	74	60.66	34.45	10.44	33.99	108	4	Peak
5150	53.17	-0.83	54	42.27	34.45	10.44	33.99	108	4	Average
5418.64	55.38	-18.62	74	43.82	34.72	10.82	33.98	108	4	Peak
5438.22	44.69	-9.31	54	33.08	34.73	10.86	33.98	108	4	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.4	65.9	-8.1	74	55	34.45	10.44	33.99	100	342	Peak
5149.4	49.51	-4.49	54	38.61	34.45	10.44	33.99	100	342	Average
5415.78	55.44	-18.56	74	43.88	34.72	10.82	33.98	100	342	Peak
5434.48	44.6	-9.4	54	32.99	34.73	10.86	33.98	100	342	Average



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	46	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5139.8	58.74	-15.26	74	47.88	34.45	10.4	33.99	108	7	Peak
5149.7	45.48	-8.52	54	34.58	34.45	10.44	33.99	108	7	Average
5438.33	54.91	-19.09	74	43.3	34.73	10.86	33.98	108	7	Peak
5369.25	44.45	-9.55	54	33.01	34.67	10.75	33.98	108	7	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.65	54.98	-19.02	74	44.08	34.45	10.44	33.99	100	350	Peak
5149.4	44.59	-9.41	54	33.69	34.45	10.44	33.99	100	350	Average
5414.9	55.48	-18.52	74	43.92	34.72	10.82	33.98	100	350	Peak
5448.78	44.54	-9.46	54	32.91	34.75	10.86	33.98	100	350	Average



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	54	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.7	54.3	-19.7	74	43.4	34.45	10.44	33.99	108	12	Peak
5149.55	43.98	-10.02	54	33.08	34.45	10.44	33.99	108	12	Average
5351.1	58.07	-15.93	74	46.68	34.65	10.72	33.98	108	12	Peak
5350.77	46.29	-7.71	54	34.9	34.65	10.72	33.98	108	12	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5019.8	54.87	-19.13	74	44.31	34.32	10.23	33.99	100	348	Peak
5145.8	43.88	-10.12	54	32.98	34.45	10.44	33.99	100	348	Average
5352.75	57.58	-16.42	74	46.19	34.65	10.72	33.98	100	348	Peak
5351.21	45.72	-8.28	54	34.33	34.65	10.72	33.98	100	348	Average



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	62	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5058.95	54.65	-19.35	74	43.97	34.37	10.3	33.99	108	22	Peak
5147.9	43.98	-10.02	54	33.08	34.45	10.44	33.99	108	22	Average
5351.76	69.33	-4.67	74	57.94	34.65	10.72	33.98	108	22	Peak
5350	53.66	-0.34	54	42.27	34.65	10.72	33.98	108	22	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5066.6	54.78	-19.22	74	44.1	34.37	10.3	33.99	100	350	Peak
5145.05	43.93	-10.07	54	33.03	34.45	10.44	33.99	100	350	Average
5351.32	69.16	-4.84	74	57.77	34.65	10.72	33.98	100	350	Peak
5351.1	50.75	-3.25	54	39.36	34.65	10.72	33.98	100	350	Average



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	102	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5464.08	69.56	-4.44	74	57.88	34.77	10.89	33.98	103	26	Peak
5470	52.96	-1.04	54	41.28	34.77	10.89	33.98	103	26	Average
5759	56.33	-17.67	74	43.88	35.06	11.39	34	103	26	Peak
5750.52	45.18	-8.82	54	32.74	35.04	11.39	33.99	103	26	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5465.2	69.37	-4.63	74	57.69	34.77	10.89	33.98	107	15	Peak
5469.84	50.05	-3.95	54	38.37	34.77	10.89	33.98	107	15	Average
5751.56	56.96	-17.04	74	44.5	35.06	11.39	33.99	107	15	Peak
5756.84	45.24	-8.76	54	32.79	35.06	11.39	34	107	15	Average



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	110	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5468.08	57.64	-16.36	74	45.96	34.77	10.89	33.98	100	26	Peak
5470	45.55	-8.45	54	33.87	34.77	10.89	33.98	100	26	Average
5743.08	56.26	-17.74	74	43.82	35.04	11.39	33.99	100	26	Peak
5732.52	45.32	-8.68	54	32.95	35.02	11.34	33.99	100	26	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5462.32	60.25	-13.75	74	48.59	34.75	10.89	33.98	107	14	Peak
5469.84	45.43	-8.57	54	33.75	34.77	10.89	33.98	107	14	Average
5745	56.31	-17.69	74	43.87	35.04	11.39	33.99	107	14	Peak
5738.12	45.23	-8.77	54	32.84	35.04	11.34	33.99	107	14	Average



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	134	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5453.36	54.75	-19.25	74	43.09	34.75	10.89	33.98	100	30	Peak
5442	44.54	-9.46	54	32.93	34.73	10.86	33.98	100	30	Average
5728.52	62.31	-11.69	74	49.94	35.02	11.34	33.99	100	30	Peak
5725.56	49.32	-4.68	54	36.95	35.02	11.34	33.99	100	30	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5394.96	55.02	-18.98	74	43.51	34.7	10.79	33.98	103	355	Peak
5442.8	44.53	-9.47	54	32.92	34.73	10.86	33.98	103	355	Average
5725.08	60.94	-13.06	74	48.57	35.02	11.34	33.99	103	355	Peak
5725.24	48.43	-5.57	54	36.06	35.02	11.34	33.99	103	355	Average



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	42	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.05	68.44	-5.56	74	57.54	34.45	10.44	33.99	119	5	Peak
5148.95	53.06	-0.94	54	42.16	34.45	10.44	33.99	119	5	Average
5367.82	55.43	-18.57	74	43.99	34.67	10.75	33.98	119	5	Peak
5350.55	45.22	-8.78	54	33.83	34.65	10.72	33.98	119	5	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5142.2	62.99	-11.01	74	52.09	34.45	10.44	33.99	101	353	Peak
5145.5	49.9	-4.1	54	39	34.45	10.44	33.99	101	353	Average
5392.13	54.93	-19.07	74	43.44	34.68	10.79	33.98	101	353	Peak
5361.22	44.68	-9.32	54	33.24	34.67	10.75	33.98	101	353	Average



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	58	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.9	56.29	-17.71	74	45.39	34.45	10.44	33.99	107	8	Peak
5149.25	45.12	-8.88	54	34.22	34.45	10.44	33.99	107	8	Average
5350.66	69.5	-4.5	74	58.11	34.65	10.72	33.98	107	8	Peak
5355.94	53.84	-0.16	54	42.45	34.65	10.72	33.98	107	8	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5145.95	54.52	-19.48	74	43.62	34.45	10.44	33.99	100	349	Peak
5143.4	44.05	-9.95	54	33.15	34.45	10.44	33.99	100	349	Average
5356.6	65.57	-8.43	74	54.15	34.65	10.75	33.98	100	349	Peak
5355.83	50.86	-3.14	54	39.47	34.65	10.72	33.98	100	349	Average



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	106	Relative Humidity :	46~47%
Test Engineer :	Kai Wang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5466.32	67.46	-6.54	74	55.78	34.77	10.89	33.98	101	26	Peak
5468.08	53.78	-0.22	54	42.1	34.77	10.89	33.98	101	26	Average
5741.08	55.88	-18.12	74	43.44	35.04	11.39	33.99	101	26	Peak
5725.64	45.25	-8.75	54	32.88	35.02	11.34	33.99	101	26	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5467.92	66.12	-7.88	74	54.44	34.77	10.89	33.98	105	3	Peak
5468.4	51.24	-2.76	54	39.56	34.77	10.89	33.98	105	3	Average
5739.08	56.26	-17.74	74	43.87	35.04	11.34	33.99	105	3	Peak
5727.88	45.22	-8.78	54	32.85	35.02	11.34	33.99	105	3	Average



3.4.6.2 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5182 MHz is fundamental signal which can be ignored. 2. 10360 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
60.24	27.12	-12.88	40	51.42	6.6	0.87	31.77	-	-	Peak
167.16	37.72	-5.78	43.5	58.03	9.86	1.58	31.75	100	352	Peak
183.36	34.61	-8.89	43.5	55.78	9.12	1.46	31.75	-	-	Peak
595.4	21.87	-24.13	46	31.82	19.35	2.75	32.05	-	-	Peak
671	23.05	-22.95	46	32.75	19.49	2.84	32.03	-	-	Peak
889.4	24.9	-21.1	46	32.24	20.9	3.34	31.58	-	-	Peak
5182	109.85	-	-	98.89	34.48	10.47	33.99	108	2	Peak
5182	100.69	-	-	89.73	34.48	10.47	33.99	108	2	Average
10360	43.14	-30.86	74	56.02	37.17	10.64	60.69	100	0	Peak
15540	47.25	-26.75	74	55.2	39.73	11.79	59.47	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	5178 MHz is fundamental signal which can be ignored. 10360 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
35.94	30.99	-9.01	40	47.1	14.98	0.7	31.79	100	128	Peak
166.35	30.2	-13.3	43.5	50.51	9.86	1.58	31.75	-	-	Peak
191.46	28.42	-15.08	43.5	49.58	9.1	1.49	31.75	-	-	Peak
489	23.41	-22.59	46	35.26	17.69	2.38	31.92	-	-	Peak
779.5	23.38	-22.62	46	32.08	20.2	3.06	31.96	-	-	Peak
902	30.33	-15.67	46	37.39	21.08	3.37	31.51	-	-	Peak
5178	109.25	-	-	98.29	34.48	10.47	33.99	100	336	Peak
5178	99.81	-	-	88.85	34.48	10.47	33.99	100	336	Average
10360	44.16	-29.84	74	57.04	37.17	10.64	60.69	159	0	Peak
15540	47.04	-26.96	74	54.99	39.73	11.79	59.47	100	0	Peak

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	44	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5222 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222	110.77	-	-	99.7	34.52	10.54	33.99	105	5	Peak
5222	100.88	-	-	89.81	34.52	10.54	33.99	105	5	Average
10440	43.19	-30.81	74	55.9	37.23	10.65	60.59	100	0	Peak
15660	46.57	-27.43	74	54.3	39.86	11.75	59.34	100	0	Peak

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	44	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5220	109.34	-	-	98.27	34.52	10.54	33.99	100	338	Peak
5220	100.11	-	-	89.04	34.52	10.54	33.99	100	338	Average
10440	42.33	-31.67	74	55.04	37.23	10.65	60.59	100	0	Peak
15660	46.68	-27.32	74	54.41	39.86	11.75	59.34	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5238 MHz is fundamental signal which can be ignored. 2. 10479 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5238	103.37	-	-	92.25	34.53	10.58	33.99	100	5	Peak
5238	93.59	-	-	82.47	34.53	10.58	33.99	100	5	Average
10479	42.72	-31.28	74	55.3	37.28	10.66	60.52	100	0	Peak
15720	47.21	-26.79	74	54.83	39.92	11.74	59.28	100	0	Peak

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5238 MHz is fundamental signal which can be ignored. 2. 10479 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5238	110.06	-	-	98.94	34.53	10.58	33.99	100	340	Peak
5238	100.6	-	-	89.48	34.53	10.58	33.99	100	340	Average
10479	42.62	-31.38	74	55.2	37.28	10.66	60.52	100	0	Peak
15720	45.69	-28.31	74	53.31	39.92	11.74	59.28	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5258 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5258	111.2	-	-	100.05	34.55	10.58	33.98	106	358	Peak
5258	101.31	-	-	90.16	34.55	10.58	33.98	106	358	Average
10521	42.83	-31.17	74	55.3	37.31	10.67	60.45	100	0	Peak
15780	47.44	-26.56	74	54.96	39.98	11.72	59.22	100	0	Peak

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	110.66	-	-	99.46	34.57	10.61	33.98	100	340	Peak
5260	100.37	-	-	89.17	34.57	10.61	33.98	100	340	Average
10521	43.34	-30.66	74	55.81	37.31	10.67	60.45	100	0	Peak
15780	46.85	-27.15	74	54.37	39.98	11.72	59.22	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	60	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	5300 MHz is fundamental signal which can be ignored. 10599 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	110.34	-	-	99.07	34.6	10.65	33.98	105	359	Peak
5300	100.67	-	-	89.4	34.6	10.65	33.98	105	359	Average
10599	43.28	-30.72	74	55.45	37.36	10.68	60.21	100	0	Peak
15900	46.71	-27.29	74	54.03	40.1	11.68	59.1	100	0	Peak

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	60	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	5298 MHz is fundamental signal which can be ignored. 10599 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5298	109.06	-	-	97.79	34.6	10.65	33.98	100	340	Peak
5298	99.18	-	-	87.91	34.6	10.65	33.98	100	340	Average
10599	43.31	-30.69	74	55.48	37.36	10.68	60.21	100	0	Peak
15900	44.81	-29.19	74	52.13	40.1	11.68	59.1	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5318 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
61.86	26.96	-13.04	40	51.44	6.4	0.89	31.77	-	-	Peak
106.14	31.11	-12.39	43.5	50.01	11.72	1.13	31.75	100	214	Peak
268.14	24.62	-21.38	46	41.45	13.09	1.81	31.73	-	-	Peak
375.6	22.03	-23.97	46	36.71	15	2.12	31.8	-	-	Peak
695.5	24.44	-21.56	46	34.18	19.4	2.88	32.02	-	-	Peak
895	24.71	-21.29	46	31.9	21	3.36	31.55	-	-	Peak
5318	111.2	-	-	99.88	34.62	10.68	33.98	105	7	Peak
5318	101.35	-	-	90.03	34.62	10.68	33.98	105	7	Average
10641	43.42	-30.58	74	55.46	37.38	10.69	60.11	100	0	Peak
15960	47.31	-26.69	74	54.51	40.17	11.66	59.03	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5318 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
35.94	30.62	-9.38	40	46.73	14.98	0.7	31.79	100	189	Peak
44.85	28.26	-11.74	40	49.68	9.6	0.76	31.78	-	-	Peak
165.54	29.8	-13.7	43.5	50.1	9.88	1.57	31.75	-	-	Peak
760.6	23.46	-22.54	46	32.19	20.2	3.05	31.98	-	-	Peak
849.5	29.35	-16.65	46	37.06	20.8	3.23	31.74	-	-	Peak
902	27.09	-18.91	46	34.15	21.08	3.37	31.51	-	-	Peak
5318	109.13	-	-	97.81	34.62	10.68	33.98	100	341	Peak
5318	99.41	-	-	88.09	34.62	10.68	33.98	100	341	Average
10641	45.33	-28.67	74	57.37	37.38	10.69	60.11	100	0	Peak
15960	46.93	-27.07	74	54.13	40.17	11.66	59.03	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	5500 MHz is fundamental signal which can be ignored. 16500 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
106.14	30.11	-13.39	43.5	49.01	11.72	1.13	31.75	-	-	Peak
167.7	36.99	-6.51	43.5	57.3	9.84	1.6	31.75	100	215	Peak
268.14	24.62	-21.38	46	41.45	13.09	1.81	31.73	-	-	Peak
375.6	22.03	-23.97	46	36.71	15	2.12	31.8	-	-	Peak
618.5	22.64	-23.36	46	32.32	19.59	2.78	32.05	-	-	Peak
951	25.57	-20.43	46	31.97	21.31	3.35	31.06	-	-	Peak
5500	111.06	-	-	99.28	34.8	10.96	33.98	100	22	Peak
5500	101.47	-	-	89.69	34.8	10.96	33.98	100	22	Average
11001	46.6	-27.4	74	57.34	37.6	10.76	59.1	100	0	Peak
16500	46.31	-27.69	74	52.39	41	11.82	58.9	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	5498 MHz is fundamental signal which can be ignored. 16500 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30	27.93	-12.07	40	40.59	18.5	0.64	31.8	-	-	Peak
44.85	28.26	-11.74	40	49.68	9.6	0.76	31.78	100	214	Peak
98.85	27.87	-15.63	43.5	47.86	10.66	1.1	31.75	-	-	Peak
578.6	22.8	-23.2	46	32.77	19.39	2.67	32.03	-	-	Peak
784.4	24.03	-21.97	46	32.78	20.15	3.06	31.96	-	-	Peak
849.5	29.35	-16.65	46	37.06	20.8	3.23	31.74	-	-	Peak
5498	110.53	-	-	98.78	34.8	10.93	33.98	105	344	Peak
5498	100.09	-	-	88.34	34.8	10.93	33.98	105	344	Average
11001	45.14	-28.86	74	55.88	37.6	10.76	59.1	100	0	Peak
16500	46.74	-27.26	74	52.82	41	11.82	58.9	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	116	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5582 MHz is fundamental signal which can be ignored. 2. 16740 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5582	110.46	-	-	98.47	34.89	11.09	33.99	100	23	Peak
5582	100.5	-	-	88.51	34.89	11.09	33.99	100	23	Average
11160	42.97	-31.03	74	53.36	37.67	10.84	58.9	100	0	Peak
16740	47.14	-26.86	74	52.75	41.24	11.91	58.76	100	0	Peak

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	116	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5578 MHz is fundamental signal which can be ignored. 2. 16740 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5578	110.37	-	-	98.4	34.87	11.09	33.99	103	346	Peak
5578	100.37	-	-	88.4	34.87	11.09	33.99	103	346	Average
11160	44.77	-29.23	74	55.16	37.67	10.84	58.9	100	0	Peak
16740	46.09	-27.91	74	51.7	41.24	11.91	58.76	100	0	Peak



Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	5702 MHz is fundamental signal which can be ignored. 17100 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5702	108.65	-	-	96.33	35.01	11.3	33.99	108	356	Peak
5702	99.3	-	-	86.98	35.01	11.3	33.99	108	356	Average
11400	41.6	-32.4	74	51.47	37.76	10.99	58.62	100	0	Peak
17100	47.23	-26.77	74	52.37	41.34	12.12	58.6	100	0	Peak

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	5698 MHz is fundamental signal which can be ignored. 17100 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5698	106.41	-	-	94.11	34.99	11.3	33.99	100	357	Peak
5698	96.92	-	-	84.62	34.99	11.3	33.99	100	357	Average
11400	43.72	-30.28	74	53.59	37.76	10.99	58.62	100	0	Peak
17100	46.55	-27.45	74	51.69	41.34	12.12	58.6	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5178 MHz is fundamental signal which can be ignored. 2. 10359 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
61.86	26.96	-13.04	40	51.44	6.4	0.89	31.77	-	-	Peak
106.14	31.11	-12.39	43.5	50.01	11.72	1.13	31.75	100	216	Peak
268.14	24.62	-21.38	46	41.45	13.09	1.81	31.73	-	-	Peak
375.6	22.03	-23.97	46	36.71	15	2.12	31.8	-	-	Peak
695.5	24.44	-21.56	46	34.18	19.4	2.88	32.02	-	-	Peak
951	25.57	-20.43	46	31.97	21.31	3.35	31.06	-	-	Peak
5178	110.27	-	-	99.31	34.48	10.47	33.99	108	352	Peak
5178	100.26	-	-	89.3	34.48	10.47	33.99	108	352	Average
10359	45.34	-28.66	74	58.22	37.17	10.64	60.69	100	0	Peak
15540	46.62	-27.38	74	54.57	39.73	11.79	59.47	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	5178 MHz is fundamental signal which can be ignored. 10359 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30	27.93	-12.07	40	40.59	18.5	0.64	31.8	-	-	Peak
44.85	28.26	-11.74	40	49.68	9.6	0.76	31.78	100	325	Peak
259.5	21.22	-24.78	46	37.26	13.9	1.79	31.73	-	-	Peak
578.6	22.8	-23.2	46	32.77	19.39	2.67	32.03	-	-	Peak
760.6	23.46	-22.54	46	32.19	20.2	3.05	31.98	-	-	Peak
902	27.09	-18.91	46	34.15	21.08	3.37	31.51	-	-	Peak
5178	109.68	-	-	98.72	34.48	10.47	33.99	100	335	Peak
5178	99.57	-	-	88.61	34.48	10.47	33.99	100	335	Average
10359	45.43	-28.57	74	58.31	37.17	10.64	60.69	100	0	Peak
15540	47.49	-26.51	74	55.44	39.73	11.79	59.47	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	44	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5218 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5218	110.34	-	-	99.27	34.52	10.54	33.99	108	4	Peak
5218	100.69	-	-	89.62	34.52	10.54	33.99	108	4	Average
10440	47.86	-26.14	74	60.57	37.23	10.65	60.59	100	0	Peak
15660	46.69	-27.31	74	54.42	39.86	11.75	59.34	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	44	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5218 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5218	109.77	-	-	98.7	34.52	10.54	33.99	100	338	Peak
5218	100.39	-	-	89.32	34.52	10.54	33.99	100	338	Average
10440	45.65	-28.35	74	58.36	37.23	10.65	60.59	100	0	Peak
15660	47.33	-26.67	74	55.06	39.86	11.75	59.34	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. 10479 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	110.23	-	-	99.11	34.53	10.58	33.99	107	36	Peak
5240	100.06	-	-	88.94	34.53	10.58	33.99	107	36	Average
10479	46.66	-27.34	74	59.24	37.28	10.66	60.52	100	0	Peak
15720	46.94	-27.06	74	54.56	39.92	11.74	59.28	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. 10479 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	110.6	-	-	99.48	34.53	10.58	33.99	100	340	Peak
5240	100.74	-	-	89.62	34.53	10.58	33.99	100	340	Average
10479	46.86	-27.14	74	59.44	37.28	10.66	60.52	100	0	Peak
15720	46.26	-27.74	74	53.88	39.92	11.74	59.28	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	110.33	-	-	99.13	34.57	10.61	33.98	108	358	Peak
5260	100.3	-	-	89.1	34.57	10.61	33.98	108	358	Average
10521	47.42	-26.58	74	59.89	37.31	10.67	60.45	100	0	Peak
15780	46.72	-27.28	74	54.24	39.98	11.72	59.22	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	109.8	-	-	98.6	34.57	10.61	33.98	100	338	Peak
5260	99.86	-	-	88.66	34.57	10.61	33.98	100	338	Average
10521	45.35	-28.65	74	57.82	37.31	10.67	60.45	100	0	Peak
15780	47.32	-26.68	74	54.84	39.98	11.72	59.22	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	60	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. 10599 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	110.49	-	-	99.22	34.6	10.65	33.98	103	0	Peak
5300	100.17	-	-	88.9	34.6	10.65	33.98	103	0	Average
10599	48.44	-25.56	74	60.61	37.36	10.68	60.21	100	0	Peak
15900	46.58	-27.42	74	53.9	40.1	11.68	59.1	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	60	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. 10599 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	109.08	-	-	97.81	34.6	10.65	33.98	109	338	Peak
5300	99.98	-	-	88.71	34.6	10.65	33.98	109	338	Average
10599	47.13	-26.87	74	59.3	37.36	10.68	60.21	100	0	Peak
15900	46.42	-27.58	74	53.74	40.1	11.68	59.1	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
61.86	26.96	-13.04	40	51.44	6.4	0.89	31.77	-	-	Peak
106.14	31.11	-12.39	43.5	50.01	11.72	1.13	31.75	113	358	Peak
268.14	24.62	-21.38	46	41.45	13.09	1.81	31.73	-	-	Peak
301.4	17.81	-28.19	46	34.38	13.24	1.91	31.72	-	-	Peak
553.4	22.54	-23.46	46	32.56	19.42	2.56	32	-	-	Peak
895	24.71	-21.29	46	31.9	21	3.36	31.55	-	-	Peak
5320	111.29	-	-	99.97	34.62	10.68	33.98	104	0	Peak
5320	101.02	-	-	89.7	34.62	10.68	33.98	104	0	Average
10641	48.85	-25.15	74	60.89	37.38	10.69	60.11	100	0	Peak
15960	46.47	-27.53	74	53.67	40.17	11.66	59.03	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
44.85	28.26	-11.74	40	49.68	9.6	0.76	31.78	100	217	Peak
98.85	27.87	-15.63	43.5	47.86	10.66	1.1	31.75	-	-	Peak
192.54	28.38	-15.12	43.5	49.53	9.1	1.5	31.75	-	-	Peak
464.5	19.96	-26.04	46	32.24	17.29	2.32	31.89	-	-	Peak
578.6	22.8	-23.2	46	32.77	19.39	2.67	32.03	-	-	Peak
721.4	23.22	-22.78	46	32.43	19.84	2.96	32.01	-	-	Peak
5320	109.7	-	-	98.38	34.62	10.68	33.98	100	339	Peak
5320	98.94	-	-	87.62	34.62	10.68	33.98	100	339	Average
10641	46.72	-27.28	74	58.76	37.38	10.69	60.11	100	0	Peak
15960	46.73	-27.27	74	53.93	40.17	11.66	59.03	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. 16500 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5500	109.96	-	-	98.18	34.8	10.96	33.98	100	12	Peak
5500	99.53	-	-	87.75	34.8	10.96	33.98	100	12	Average
11001	47.28	-26.72	74	58.02	37.6	10.76	59.1	100	0	Peak
16500	46.17	-27.83	74	52.25	41	11.82	58.9	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. 16500 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5500	109.36	-	-	97.58	34.8	10.96	33.98	103	334	Peak
5500	98.98	-	-	87.2	34.8	10.96	33.98	103	334	Average
11001	47.57	-26.43	74	58.31	37.6	10.76	59.1	100	0	Peak
16500	46	-28	74	52.08	41	11.82	58.9	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	116	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. 16740 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5580	108.34	-	-	96.37	34.87	11.09	33.99	100	337	Peak
5580	98.29	-	-	86.32	34.87	11.09	33.99	100	337	Average
11160	44.19	-29.81	74	54.58	37.67	10.84	58.9	100	0	Peak
16740	46.31	-27.69	74	51.92	41.24	11.91	58.76	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	116	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. 16740 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5580	108.1	-	-	96.13	34.87	11.09	33.99	103	4	Peak
5580	97.51	-	-	85.54	34.87	11.09	33.99	103	4	Average
11160	44.02	-29.98	74	54.41	37.67	10.84	58.9	100	0	Peak
16740	46.12	-27.88	74	51.73	41.24	11.91	58.76	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. 17100 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
35.94	18.65	-21.35	40	34.76	14.98	0.7	31.79	-	-	Peak
93.72	25.49	-18.01	43.5	46.36	9.8	1.08	31.75	115	320	Peak
268.14	24.62	-21.38	46	41.45	13.09	1.81	31.73	-	-	Peak
539.4	21.26	-24.74	46	31.68	19.03	2.53	31.98	-	-	Peak
618.5	22.64	-23.36	46	32.32	19.59	2.78	32.05	-	-	Peak
895	24.71	-21.29	46	31.9	21	3.36	31.55	-	-	Peak
5700	107.09	-	-	94.79	34.99	11.3	33.99	106	55	Peak
5700	97.43	-	-	85.13	34.99	11.3	33.99	106	55	Average
11400	43.54	-30.46	74	53.41	37.76	10.99	58.62	100	0	Peak
17100	46.86	-27.14	74	52	41.34	12.12	58.6	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. 17100 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
60.24	24.95	-15.05	40	49.25	6.6	0.87	31.77	100	219	Peak
80.76	21.09	-18.91	40	44.76	7.1	0.99	31.76	-	-	Peak
259.5	21.22	-24.78	46	37.26	13.9	1.79	31.73	-	-	Peak
578.6	22.8	-23.2	46	32.77	19.39	2.67	32.03	-	-	Peak
721.4	23.22	-22.78	46	32.43	19.84	2.96	32.01	-	-	Peak
902	27.09	-18.91	46	34.15	21.08	3.37	31.51	-	-	Peak
5700	105.95	-	-	93.65	34.99	11.3	33.99	100	22	Peak
5700	96.2	-	-	83.9	34.99	11.3	33.99	100	22	Average
11400	43.83	-30.17	74	53.7	37.76	10.99	58.62	100	0	Peak
17100	46.24	-27.76	74	51.38	41.34	12.12	58.6	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	38	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. 10380 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
98.04	28.16	-15.34	43.5	48.3	10.52	1.09	31.75	100	239	Peak
121.8	25.43	-18.07	43.5	43.83	12.12	1.23	31.75	-	-	Peak
268.14	24.62	-21.38	46	41.45	13.09	1.81	31.73	-	-	Peak
375.6	22.03	-23.97	46	36.71	15	2.12	31.8	-	-	Peak
618.5	22.64	-23.36	46	32.32	19.59	2.78	32.05	-	-	Peak
895	24.71	-21.29	46	31.9	21	3.36	31.55	-	-	Peak
5190	100.73	-	-	89.73	34.48	10.51	33.99	109	334	Peak
5190	92.23	-	-	81.23	34.48	10.51	33.99	109	334	Average
10380	40.82	-33.18	74	53.66	37.18	10.64	60.66	100	0	Peak
15570	46.32	-27.68	74	54.2	39.77	11.78	59.43	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	38	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. 10380 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30	27.93	-12.07	40	40.59	18.5	0.64	31.8	100	258	Peak
42.15	27.12	-12.88	40	47.24	10.92	0.75	31.79	-	-	Peak
192.54	28.38	-15.12	43.5	49.53	9.1	1.5	31.75	-	-	Peak
578.6	22.8	-23.2	46	32.77	19.39	2.67	32.03	-	-	Peak
784.4	24.03	-21.97	46	32.78	20.15	3.06	31.96	-	-	Peak
944	24.95	-21.05	46	31.42	21.3	3.35	31.12	-	-	Peak
5190	102.65	-	-	91.65	34.48	10.51	33.99	100	329	Peak
5190	92.36	-	-	81.36	34.48	10.51	33.99	100	329	Average
10380	42.63	-31.37	74	55.47	37.18	10.64	60.66	100	0	Peak
15570	46.54	-27.46	74	54.42	39.77	11.78	59.43	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	46	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5232 MHz is fundamental signal which can be ignored. 2. 10460 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5232	107.12	-	-	96.04	34.53	10.54	33.99	107	33	Peak
5232	97.82	-	-	86.74	34.53	10.54	33.99	107	33	Average
10460	43.68	-30.32	74	56.3	37.27	10.66	60.55	100	0	Peak
15690	46.19	-27.81	74	53.86	39.89	11.75	59.31	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	46	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5234 MHz is fundamental signal which can be ignored. 2. 10460 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5234	108.4	-	-	97.32	34.53	10.54	33.99	100	339	Peak
5234	98.73	-	-	87.65	34.53	10.54	33.99	100	339	Average
10460	45.31	-28.69	74	57.93	37.27	10.66	60.55	100	0	Peak
15690	45.9	-28.1	74	53.57	39.89	11.75	59.31	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	54	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5272 MHz is fundamental signal which can be ignored. 2. 10539 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5272	107.01	-	-	95.81	34.57	10.61	33.98	100	36	Peak
5272	97.41	-	-	86.21	34.57	10.61	33.98	100	36	Average
10539	47.11	-26.89	74	59.52	37.32	10.67	60.4	100	0	Peak
15816	47.21	-26.79	74	54.64	40.03	11.71	59.17	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	54	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5272 MHz is fundamental signal which can be ignored. 2. 10539 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5272	109.45	-	-	98.25	34.57	10.61	33.98	100	347	Peak
5272	100.31	-	-	89.11	34.57	10.61	33.98	100	347	Average
10539	44.82	-29.18	74	57.23	37.32	10.67	60.4	100	0	Peak
15816	47.68	-26.32	74	55.11	40.03	11.71	59.17	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	62	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5308 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
52.14	19.47	-20.53	40	42.77	7.66	0.82	31.78	-	-	Peak
121.8	25.43	-18.07	43.5	43.83	12.12	1.23	31.75	112	235	Peak
282.45	20.33	-25.67	46	37.38	12.84	1.84	31.73	-	-	Peak
413.4	20.31	-25.69	46	33.47	16.45	2.22	31.83	-	-	Peak
618.5	22.64	-23.36	46	32.32	19.59	2.78	32.05	-	-	Peak
874	24.69	-21.31	46	32.13	20.9	3.3	31.64	-	-	Peak
5308	105.14	-	-	93.84	34.6	10.68	33.98	139	6	Peak
5308	95.74	-	-	84.44	34.6	10.68	33.98	139	6	Average
10620	44.16	-29.84	74	56.26	37.37	10.69	60.16	100	0	Peak
15930	46.47	-27.53	74	53.74	40.13	11.67	59.07	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	62	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5312 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
44.85	28.26	-11.74	40	49.68	9.6	0.76	31.78	100	320	Peak
71.85	20.62	-19.38	40	44.94	6.5	0.95	31.77	-	-	Peak
259.5	21.22	-24.78	46	37.26	13.9	1.79	31.73	-	-	Peak
427.4	19.34	-26.66	46	32.13	16.8	2.26	31.85	-	-	Peak
578.6	22.8	-23.2	46	32.77	19.39	2.67	32.03	-	-	Peak
944	24.95	-21.05	46	31.42	21.3	3.35	31.12	-	-	Peak
5312	103.41	-	-	92.09	34.62	10.68	33.98	100	356	Peak
5312	93.03	-	-	81.71	34.62	10.68	33.98	100	356	Average
10620	44.16	-29.84	74	56.26	37.37	10.69	60.16	100	0	Peak
15930	45.99	-28.01	74	53.26	40.13	11.67	59.07	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	102	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5512 MHz is fundamental signal which can be ignored. 2. 16530 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
99.39	30.41	-13.09	43.5	50.26	10.8	1.1	31.75	-	-	Peak
105.6	32.25	-11.25	43.5	51.15	11.72	1.13	31.75	-	-	Peak
168.24	36.09	-7.41	43.5	56.41	9.82	1.61	31.75	112	235	Peak
557.6	21.42	-24.58	46	31.51	19.34	2.58	32.01	-	-	Peak
830.6	24.24	-21.76	46	32.3	20.6	3.16	31.82	-	-	Peak
844.6	24.63	-21.37	46	32.43	20.75	3.21	31.76	-	-	Peak
5512	105.68	-	-	93.9	34.8	10.96	33.98	100	25	Peak
5512	95.53	-	-	83.75	34.8	10.96	33.98	100	25	Average
11020	44.4	-29.6	74	55.11	37.61	10.76	59.08	100	0	Peak
16530	47.17	-26.83	74	53.19	41.03	11.83	58.88	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	102	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5512 MHz is fundamental signal which can be ignored. 2. 16530 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30	29.07	-10.93	40	41.73	18.5	0.64	31.8	100	214	Peak
56.46	26.32	-13.68	40	50.57	6.68	0.85	31.78	-	-	Peak
193.35	27.41	-16.09	43.5	48.56	9.1	1.5	31.75	-	-	Peak
487.6	19.89	-26.11	46	31.76	17.68	2.37	31.92	-	-	Peak
786.5	24.14	-21.86	46	32.9	20.14	3.06	31.96	-	-	Peak
896.4	25.02	-20.98	46	32.19	21.02	3.36	31.55	-	-	Peak
5512	102.7	-	-	90.9	34.82	10.96	33.98	104	18	Peak
5512	92.9	-	-	81.1	34.82	10.96	33.98	104	18	Average
11020	44.53	-29.47	74	55.24	37.61	10.76	59.08	100	0	Peak
16530	47.19	-26.81	74	53.21	41.03	11.83	58.88	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	110	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5552 MHz is fundamental signal which can be ignored. 2. 16650 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5552	110.03	-	-	98.11	34.85	11.05	33.98	100	24	Peak
5552	100.58	-	-	88.66	34.85	11.05	33.98	100	24	Average
11100	43.38	-30.62	74	53.9	37.64	10.82	58.98	100	0	Peak
16650	47.18	-26.82	74	52.95	41.16	11.88	58.81	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	110	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5548 MHz is fundamental signal which can be ignored. 2. 16650 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5548	108.43	-	-	96.51	34.85	11.05	33.98	104	18	Peak
5548	98.81	-	-	86.89	34.85	11.05	33.98	104	18	Average
11100	44.75	-29.25	74	55.27	37.64	10.82	58.98	100	0	Peak
16650	46.19	-27.81	74	51.96	41.16	11.88	58.81	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	134	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5672 MHz is fundamental signal which can be ignored. 2. 17010 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5672	108.2	-	-	95.96	34.97	11.26	33.99	108	336	Peak
5672	98.06	-	-	85.82	34.97	11.26	33.99	108	336	Average
11340	44.16	-29.84	74	54.17	37.73	10.96	58.7	100	0	Peak
17010	47.54	-26.46	74	52.67	41.47	12	58.6	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	134	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5672 MHz is fundamental signal which can be ignored. 2. 17010 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5672	106.88	-	-	94.64	34.97	11.26	33.99	101	9	Peak
5672	96.69	-	-	84.45	34.97	11.26	33.99	101	9	Average
11340	44.02	-29.98	74	54.03	37.73	10.96	58.7	100	0	Peak
17010	47.19	-26.81	74	52.32	41.47	12	58.6	100	0	Peak



Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5182 MHz is fundamental signal which can be ignored. 2. 10360 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5182	111.62	-	-	100.66	34.48	10.47	33.99	107	17	Peak
5182	101.57	-	-	90.61	34.48	10.47	33.99	107	17	Average
10360	48.66	-25.34	74	61.54	37.17	10.64	60.69	100	0	Peak
15540	47.17	-26.83	74	55.12	39.73	11.79	59.47	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	36	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5178 MHz is fundamental signal which can be ignored. 2. 10360 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5178	111.15	-	-	100.19	34.48	10.47	33.99	100	337	Peak
5178	101.1	-	-	90.14	34.48	10.47	33.99	100	337	Average
10360	45.14	-28.86	74	58.02	37.17	10.64	60.69	100	0	Peak
15540	46.28	-27.72	74	54.23	39.73	11.79	59.47	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	44	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5222 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222	111.53	-	-	100.46	34.52	10.54	33.99	106	18	Peak
5222	101.94	-	-	90.87	34.52	10.54	33.99	106	18	Average
10440	47.74	-26.26	74	60.45	37.23	10.65	60.59	100	0	Peak
15660	46.79	-27.21	74	54.52	39.86	11.75	59.34	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	44	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5218 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5218	109.44	-	-	98.37	34.52	10.54	33.99	100	341	Peak
5218	100.8	-	-	89.73	34.52	10.54	33.99	100	341	Average
10440	44.77	-29.23	74	57.48	37.23	10.65	60.59	100	0	Peak
15660	46.6	-27.4	74	54.33	39.86	11.75	59.34	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5238 MHz is fundamental signal which can be ignored. 2. 10480 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5238	113.36	-	-	102.24	34.53	10.58	33.99	107	18	Peak
5238	103.59	-	-	92.47	34.53	10.58	33.99	107	18	Average
10480	47.99	-26.01	74	60.57	37.28	10.66	60.52	100	0	Peak
15720	46.39	-27.61	74	54.01	39.92	11.74	59.28	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	48	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5242 MHz is fundamental signal which can be ignored. 2. 10480 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5242	110.88	-	-	99.8	34.53	10.54	33.99	100	342	Peak
5242	100.23	-	-	89.15	34.53	10.54	33.99	100	342	Average
10480	46.19	-27.81	74	58.77	37.28	10.66	60.52	100	0	Peak
15720	46.19	-27.81	74	53.81	39.92	11.74	59.28	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10520 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	109.86	-	-	98.66	34.57	10.61	33.98	108	24	Peak
5260	99.96	-	-	88.76	34.57	10.61	33.98	108	24	Average
10520	47.54	-26.46	74	60.02	37.31	10.66	60.45	100	0	Peak
15780	47.54	-26.46	74	55.06	39.98	11.72	59.22	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	52	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. 10520 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	109.26	-	-	98.06	34.57	10.61	33.98	100	332	Peak
5260	99.28	-	-	88.08	34.57	10.61	33.98	100	332	Average
10520	48.57	-25.43	74	61.04	37.31	10.67	60.45	100	0	Peak
15780	46.89	-27.11	74	54.41	39.98	11.72	59.22	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	60	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	107.62	-	-	96.35	34.6	10.65	33.98	106	40	Peak
5300	97.8	-	-	86.53	34.6	10.65	33.98	106	40	Average
10600	48.22	-25.78	74	60.45	37.35	10.68	60.26	100	0	Peak
15900	46.2	-27.8	74	53.52	40.1	11.68	59.1	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	60	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5300	109.24	-	-	97.97	34.6	10.65	33.98	100	342	Peak
5300	98.8	-	-	87.53	34.6	10.65	33.98	100	342	Average
10600	45.88	-28.12	74	58.05	37.36	10.68	60.21	100	0	Peak
15900	45.61	-28.39	74	52.93	40.1	11.68	59.1	100	0	Peak



Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5320	108.54	-	-	97.22	34.62	10.68	33.98	106	49	Peak
5320	98.52	-	-	87.2	34.62	10.68	33.98	106	49	Average
10640	47.67	-26.33	74	59.71	37.38	10.69	60.11	100	0	Peak
15960	47.2	-26.8	74	54.4	40.17	11.66	59.03	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	64	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5320	108.05	-	-	96.73	34.62	10.68	33.98	100	330	Peak
5320	98.1	-	-	86.78	34.62	10.68	33.98	100	330	Average
10640	46.26	-27.74	74	58.3	37.38	10.69	60.11	100	0	Peak
15960	47.18	-26.82	74	54.38	40.17	11.66	59.03	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. 16500 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5500	108.47	-	-	96.74	34.78	10.93	33.98	100	36	Peak
5500	98.49	-	-	86.71	34.8	10.96	33.98	100	36	Average
11100	43.86	-30.14	74	54.38	37.64	10.82	58.98	100	0	Peak
16500	45.99	-28.01	74	52.07	41	11.82	58.9	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	100	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. 16500 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5500	104.23	-	-	92.45	34.8	10.96	33.98	100	166	Peak
5500	94.35	-	-	82.57	34.8	10.96	33.98	100	166	Average
11100	45.22	-28.78	74	55.74	37.64	10.82	58.98	100	0	Peak
16500	46.2	-27.8	74	52.28	41	11.82	58.9	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	116	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. 16740 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5580	108.68	-	-	96.71	34.87	11.09	33.99	100	38	Peak
5580	98.18	-	-	86.21	34.87	11.09	33.99	100	38	Average
11160	46.15	-27.85	74	56.54	37.67	10.84	58.9	100	0	Peak
16740	47.52	-26.48	74	53.13	41.24	11.91	58.76	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	116	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5578 MHz is fundamental signal which can be ignored. 2. 16740 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5578	107.62	-	-	95.65	34.87	11.09	33.99	104	346	Peak
5578	97.49	-	-	85.52	34.87	11.09	33.99	104	346	Average
11160	46.06	-27.94	74	56.45	37.67	10.84	58.9	100	0	Peak
16740	46.76	-27.24	74	52.37	41.24	11.91	58.76	100	0	Peak



Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. 17100 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5700	107.88	-	-	95.58	34.99	11.3	33.99	108	49	Peak
5700	97.72	-	-	85.42	34.99	11.3	33.99	108	49	Average
11400	44.42	-29.58	74	54.29	37.76	10.99	58.62	100	0	Peak
17100	47.58	-26.42	74	52.72	41.34	12.12	58.6	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	140	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5698 MHz is fundamental signal which can be ignored. 2. 17100 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5698	106.93	-	-	94.63	34.99	11.3	33.99	100	35	Peak
5698	96.53	-	-	84.23	34.99	11.3	33.99	100	35	Average
11400	45.51	-28.49	74	55.38	37.76	10.99	58.62	100	0	Peak
17100	46.71	-27.29	74	51.85	41.34	12.12	58.6	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	38	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. 10380 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5190	106.23	-	-	95.23	34.48	10.51	33.99	108	4	Peak
5190	96.08	-	-	85.08	34.48	10.51	33.99	108	4	Average
10380	45.57	-28.43	74	58.41	37.18	10.64	60.66	100	0	Peak
15570	47.11	-26.89	74	54.99	39.77	11.78	59.43	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	38	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. 10380 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5190	101.25	-	-	90.25	34.48	10.51	33.99	100	342	Peak
5190	91.18	-	-	80.18	34.48	10.51	33.99	100	342	Average
10380	44.24	-29.76	74	57.08	37.18	10.64	60.66	100	0	Peak
15570	46.4	-27.6	74	54.28	39.77	11.78	59.43	100	0	Peak



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	46	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	5232 MHz is fundamental signal which can be ignored. 10461 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5232	108.74	-	-	97.66	34.53	10.54	33.99	108	7	Peak
5232	98.88	-	-	87.8	34.53	10.54	33.99	108	7	Average
10461	47.58	-26.42	74	60.2	37.27	10.66	60.55	100	0	Peak
15690	45.63	-28.37	74	53.3	39.89	11.75	59.31	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	46	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	5236 MHz is fundamental signal which can be ignored. 10461 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5236	106.28	-	-	95.2	34.53	10.54	33.99	100	350	Peak
5236	96.71	-	-	85.63	34.53	10.54	33.99	100	350	Average
10461	46.71	-27.29	74	59.33	37.27	10.66	60.55	100	0	Peak
15690	46.58	-27.42	74	54.25	39.89	11.75	59.31	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	54	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5272 MHz is fundamental signal which can be ignored. 2. 10539 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5272	109.62	-	-	98.42	34.57	10.61	33.98	108	12	Peak
5272	99.23	-	-	88.03	34.57	10.61	33.98	108	12	Average
10539	44.87	-29.13	74	57.28	37.32	10.67	60.4	100	0	Peak
15810	48.84	-25.16	74	56.31	40.01	11.71	59.19	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	54	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5272 MHz is fundamental signal which can be ignored. 2. 10539 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5272	106.58	-	-	95.38	34.57	10.61	33.98	100	348	Peak
5272	96.53	-	-	85.33	34.57	10.61	33.98	100	348	Average
10539	45.8	-28.2	74	58.21	37.32	10.67	60.4	100	0	Peak
15810	48.13	-25.87	74	55.6	40.01	11.71	59.19	100	0	Peak



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	62	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5312 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5312	107.39	-	-	96.07	34.62	10.68	33.98	108	22	Peak
5312	97.51	-	-	86.19	34.62	10.68	33.98	108	22	Average
10620	45.13	-28.87	74	57.23	37.37	10.69	60.16	100	0	Peak
15930	49.88	-24.12	74	57.15	40.13	11.67	59.07	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	62	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5312 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5312	104.11	-	-	92.79	34.62	10.68	33.98	100	350	Peak
5312	94.04	-	-	82.72	34.62	10.68	33.98	100	350	Average
10620	44.24	-29.76	74	56.34	37.37	10.69	60.16	100	0	Peak
15930	47.03	-26.97	74	54.3	40.13	11.67	59.07	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	102	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5512 MHz is fundamental signal which can be ignored. 2. 16530 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5512	105.4	-	-	93.62	34.8	10.96	33.98	103	26	Peak
5512	94.99	-	-	83.21	34.8	10.96	33.98	103	26	Average
11019	44.25	-29.75	74	54.96	37.61	10.76	59.08	100	0	Peak
16530	46.99	-27.01	74	53.01	41.03	11.83	58.88	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	102	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5512 MHz is fundamental signal which can be ignored. 2. 16530 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5512	101.55	-	-	89.77	34.8	10.96	33.98	107	15	Peak
5512	91.31	-	-	79.53	34.8	10.96	33.98	107	15	Average
11019	45.04	-28.96	74	55.75	37.61	10.76	59.08	100	0	Peak
16530	47.12	-26.88	74	53.14	41.03	11.83	58.88	100	0	Peak



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	110	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5552 MHz is fundamental signal which can be ignored. 2. 16650 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5552	106.84	-	-	94.92	34.85	11.05	33.98	100	26	Peak
5552	96.62	-	-	84.7	34.85	11.05	33.98	100	26	Average
11100	47.81	-26.19	74	58.33	37.64	10.82	58.98	100	0	Peak
16650	47.04	-26.96	74	52.81	41.16	11.88	58.81	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	110	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5548 MHz is fundamental signal which can be ignored. 2. 16650 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5548	105.51	-	-	93.59	34.85	11.05	33.98	107	14	Peak
5548	95.61	-	-	83.69	34.85	11.05	33.98	107	14	Average
11100	45.51	-28.49	74	56.03	37.64	10.82	58.98	100	0	Peak
16650	47.02	-26.98	74	52.79	41.16	11.88	58.81	100	0	Peak



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	134	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5674 MHz is fundamental signal which can be ignored. 2. 17010 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5674	104.12	-	-	91.88	34.97	11.26	33.99	100	30	Peak
5674	94.12	-	-	81.88	34.97	11.26	33.99	100	30	Average
11340	46.59	-27.41	74	56.6	37.73	10.96	58.7	100	0	Peak
17010	46.86	-27.14	74	51.99	41.47	12	58.6	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	134	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5668 MHz is fundamental signal which can be ignored. 2. 17010 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5668	104.48	-	-	92.28	34.97	11.22	33.99	103	355	Peak
5668	94.6	-	-	82.4	34.97	11.22	33.99	103	355	Average
11340	45.74	-28.26	74	55.75	37.73	10.96	58.7	100	0	Peak
17010	46.98	-27.02	74	52.11	41.47	12	58.6	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	42	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5208 MHz is fundamental signal which can be ignored. 2. 10419 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
61.05	27.5	-12.5	40	51.89	6.5	0.88	31.77	-	-	Peak
98.04	28.24	-15.26	43.5	48.38	10.52	1.09	31.75	-	-	Peak
167.16	37.63	-5.87	43.5	57.94	9.86	1.58	31.75	111	320	Peak
415.5	20.66	-25.34	46	33.72	16.55	2.23	31.84	-	-	Peak
613.6	22.94	-23.06	46	32.67	19.54	2.78	32.05	-	-	Peak
907.6	25.04	-20.96	46	32.11	21.02	3.37	31.46	-	-	Peak
5208	102.42	-	-	91.38	34.52	10.51	33.99	119	5	Peak
5208	92.45	-	-	81.41	34.52	10.51	33.99	119	5	Average
10419	43.27	-30.73	74	56.02	37.22	10.65	60.62	100	0	Peak
15630	46.97	-27.03	74	54.73	39.84	11.76	59.36	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	42	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5214 MHz is fundamental signal which can be ignored. 2. 10419 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
44.85	28.32	-11.68	40	49.74	9.6	0.76	31.78	100	158	Peak
166.35	30.01	-13.49	43.5	50.32	9.86	1.58	31.75	-	-	Peak
190.65	28.72	-14.78	43.5	49.88	9.1	1.49	31.75	-	-	Peak
534.5	21.05	-24.95	46	31.84	18.66	2.52	31.97	-	-	Peak
769	23.72	-22.28	46	32.53	20.11	3.05	31.97	-	-	Peak
847.4	24.72	-21.28	46	32.47	20.78	3.22	31.75	-	-	Peak
5214	98.47	-	-	87.4	34.52	10.54	33.99	101	353	Peak
5214	88.42	-	-	77.35	34.52	10.54	33.99	101	353	Average
10419	44.96	-29.04	74	57.71	37.22	10.65	60.62	100	0	Peak
15630	47.52	-26.48	74	55.28	39.84	11.76	59.36	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	58	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5294 MHz is fundamental signal which can be ignored. 2. 10581 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30	18.89	-21.11	40	31.55	18.5	0.64	31.8	-	-	Peak
61.05	27.58	-12.42	40	51.97	6.5	0.88	31.77	-	-	Peak
188.76	35.18	-8.32	43.5	56.37	9.08	1.48	31.75	111	148	Peak
527.5	21.29	-24.71	46	32.5	18.24	2.52	31.97	-	-	Peak
639.5	22.42	-23.58	46	32.05	19.62	2.79	32.04	-	-	Peak
770.4	24.3	-21.7	46	33.12	20.1	3.05	31.97	-	-	Peak
5294	104.64	-	-	93.37	34.6	10.65	33.98	107	8	Peak
5294	94.47	-	-	83.2	34.6	10.65	33.98	107	8	Average
10581	43.79	-30.21	74	56.02	37.35	10.68	60.26	100	0	Peak
15870	45.9	-28.1	74	53.25	40.08	11.69	59.12	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	58	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	5288 MHz is fundamental signal which can be ignored. 10581 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30	28.15	-11.85	40	40.81	18.5	0.64	31.8	-	-	Peak
35.94	31.14	-8.86	40	47.25	14.98	0.7	31.79	100	236	Peak
45.66	28.23	-11.77	40	49.86	9.38	0.77	31.78	-	-	Peak
483.4	19.56	-26.44	46	31.51	17.63	2.33	31.91	-	-	Peak
632.5	22.48	-23.52	46	31.98	19.76	2.79	32.05	-	-	Peak
891.5	24.53	-21.47	46	31.83	20.92	3.35	31.57	-	-	Peak
5288	100.61	-	-	89.36	34.58	10.65	33.98	100	349	Peak
5288	90.34	-	-	79.09	34.58	10.65	33.98	100	349	Average
10581	44.89	-29.11	74	57.12	37.35	10.68	60.26	100	0	Peak
15870	46.23	-27.77	74	53.58	40.08	11.69	59.12	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	106	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5532 MHz is fundamental signal which can be ignored. 2. 16590 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
106.14	31.59	-11.91	43.5	50.49	11.72	1.13	31.75	-	-	Peak
189.3	35.03	-8.47	43.5	56.22	9.08	1.48	31.75	110	325	Peak
267.06	25.23	-20.77	46	41.89	13.27	1.8	31.73	-	-	Peak
545	21.99	-24.01	46	32.14	19.3	2.54	31.99	-	-	Peak
790	24.1	-21.9	46	32.9	20.1	3.06	31.96	-	-	Peak
926.5	25.65	-20.35	46	32.42	21.16	3.36	31.29	-	-	Peak
5532	100.84	-	-	88.99	34.83	11	33.98	101	26	Peak
5532	90.64	-	-	78.79	34.83	11	33.98	101	26	Average
11061	46.1	-27.9	74	56.7	37.63	10.79	59.02	100	0	Peak
16590	46.75	-27.25	74	52.65	41.09	11.86	58.85	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	106	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5538 MHz is fundamental signal which can be ignored. 2. 16590 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30	28.16	-11.84	40	40.82	18.5	0.64	31.8	-	-	Peak
45.66	29.18	-10.82	40	50.81	9.38	0.77	31.78	100	236	Peak
166.35	30.19	-13.31	43.5	50.5	9.86	1.58	31.75	-	-	Peak
587	22.46	-23.54	46	32.46	19.33	2.71	32.04	-	-	Peak
763.4	23.44	-22.56	46	32.2	20.17	3.05	31.98	-	-	Peak
874	25.03	-20.97	46	32.47	20.9	3.3	31.64	-	-	Peak
5538	99.12	-	-	87.27	34.83	11	33.98	105	3	Peak
5538	88.68	-	-	76.83	34.83	11	33.98	105	3	Average
11061	44.84	-29.16	74	55.44	37.63	10.79	59.02	100	0	Peak
16590	47.12	-26.88	74	53.02	41.09	11.86	58.85	100	0	Peak

**<Straddle Channel>**

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	144	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5722 MHz is fundamental signal which can be ignored. 2. 17160 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5722	107.44	-	-	95.07	35.02	11.34	33.99	100	38	Peak
5722	97.01	-	-	84.64	35.02	11.34	33.99	100	38	Average
11439	43.51	-30.49	74	53.31	37.77	11.01	58.58	100	0	Peak
17160	46.22	-27.78	74	51.41	41.23	12.18	58.6	100	0	Peak

Test Mode :	802.11a	Temperature :	24~25°C
Test Channel :	144	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5716 MHz is fundamental signal which can be ignored. 2. 17160 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5716	106.82	-	-	94.5	35.01	11.3	33.99	101	33	Peak
5716	96.58	-	-	84.26	35.01	11.3	33.99	101	33	Average
11439	44.52	-29.48	74	54.32	37.77	11.01	58.58	100	0	Peak
17160	46.84	-27.16	74	52.03	41.23	12.18	58.6	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	144	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5722 MHz is fundamental signal which can be ignored. 2. 17160 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5722	106.86	-	-	94.49	35.02	11.34	33.99	100	29	Peak
5722	96.85	-	-	84.48	35.02	11.34	33.99	100	29	Average
11439	44.49	-29.51	74	54.29	37.77	11.01	58.58	100	0	Peak
17160	46.41	-27.59	74	51.6	41.23	12.18	58.6	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	24~25°C
Test Channel :	144	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5718 MHz is fundamental signal which can be ignored. 2. 17160 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5718	106.2	-	-	93.83	35.02	11.34	33.99	101	26	Peak
5718	96.07	-	-	83.7	35.02	11.34	33.99	101	26	Average
11439	45.01	-28.99	74	54.81	37.77	11.01	58.58	100	0	Peak
17160	47.19	-26.81	74	52.38	41.23	12.18	58.6	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	142	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5708 MHz is fundamental signal which can be ignored. 2. 17130 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5708	103.66	-	-	91.34	35.01	11.3	33.99	100	30	Peak
5708	93.69	-	-	81.37	35.01	11.3	33.99	100	30	Average
11421	44.99	-29.01	74	54.82	37.77	11	58.6	100	0	Peak
17130	46.81	-27.19	74	51.97	41.29	12.15	58.6	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	24~25°C
Test Channel :	142	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5712 MHz is fundamental signal which can be ignored. 2. 17130 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5712	103.42	-	-	91.1	35.01	11.3	33.99	103	16	Peak
5712	93.28	-	-	80.96	35.01	11.3	33.99	103	16	Average
11421	44.8	-29.2	74	54.63	37.77	11	58.6	100	0	Peak
17130	48.71	-25.29	74	53.87	41.29	12.15	58.6	100	0	Peak



Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	144	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5721 MHz is fundamental signal which can be ignored. 2. 17160 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5721	107.34	-	-	94.97	35.02	11.34	33.99	108	47	Peak
5721	97.45	-	-	85.08	35.02	11.34	33.99	108	47	Average
11439	44.1	-29.9	74	53.9	37.77	11.01	58.58	100	0	Peak
17160	45.98	-28.02	74	51.17	41.23	12.18	58.6	100	0	Peak

Test Mode :	802.11n VHT20	Temperature :	24~25°C
Test Channel :	144	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5718 MHz is fundamental signal which can be ignored. 2. 17160 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5718	106.21	-	-	93.84	35.02	11.34	33.99	101	27	Peak
5718	96.14	-	-	83.77	35.02	11.34	33.99	101	27	Average
11439	44.21	-29.79	74	54.01	37.77	11.01	58.58	100	0	Peak
17160	46.67	-27.33	74	51.86	41.23	12.18	58.6	100	0	Peak



Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	142	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5708 MHz is fundamental signal which can be ignored. 2. 17130 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5708	105.71	-	-	93.39	35.01	11.3	33.99	108	44	Peak
5708	95.85	-	-	83.53	35.01	11.3	33.99	108	44	Average
11421	44.08	-29.92	74	53.91	37.77	11	58.6	100	0	Peak
17130	46.49	-27.51	74	51.65	41.29	12.15	58.6	100	0	Peak

Test Mode :	802.11n VHT40	Temperature :	24~25°C
Test Channel :	142	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5712 MHz is fundamental signal which can be ignored. 2. 17130 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5712	102.95	-	-	90.63	35.01	11.3	33.99	100	55	Peak
5712	92.79	-	-	80.47	35.01	11.3	33.99	100	55	Average
11420	44.17	-29.83	74	54	37.77	11	58.6	100	0	Peak
17130	47.85	-26.15	74	53.01	41.29	12.15	58.6	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	138	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Horizontal
Remark :	1. 5688 MHz is fundamental signal which can be ignored. 2. 17070 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5688	103.3	-	-	91.04	34.99	11.26	33.99	109	48	Peak
5688	93.11	-	-	80.85	34.99	11.26	33.99	109	48	Average
11379	44.38	-29.62	74	54.3	37.75	10.97	58.64	100	0	Peak
17070	47.14	-26.86	74	52.26	41.39	12.09	58.6	100	0	Peak

Test Mode :	802.11n VHT80	Temperature :	24~25°C
Test Channel :	138	Relative Humidity :	46~47%
Test Engineer :	Kai Wang	Polarization :	Vertical
Remark :	1. 5688 MHz is fundamental signal which can be ignored. 2. 17070 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5688	102.01	-	-	89.75	34.99	11.26	33.99	103	16	Peak
5688	91.98	-	-	79.72	34.99	11.26	33.99	103	16	Average
11379	44.21	-29.79	74	54.13	37.75	10.97	58.64	100	0	Peak
17070	47.37	-26.63	74	52.49	41.39	12.09	58.6	100	0	Peak

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

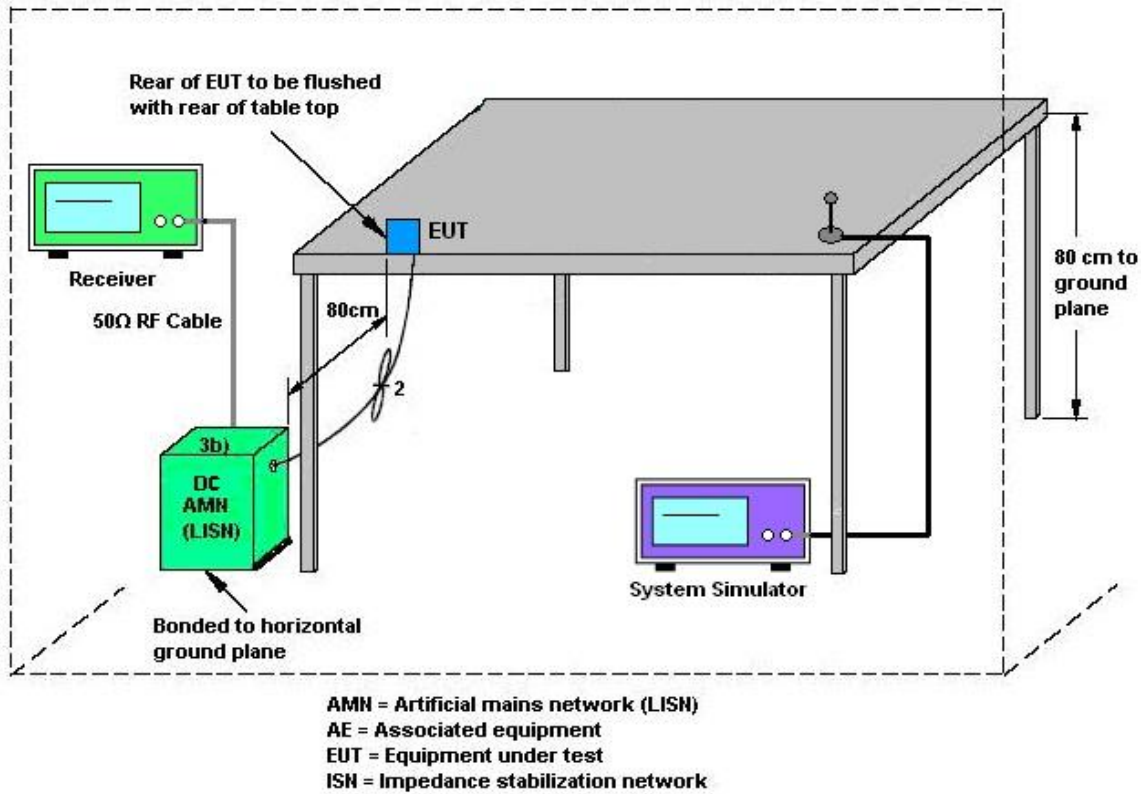
3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

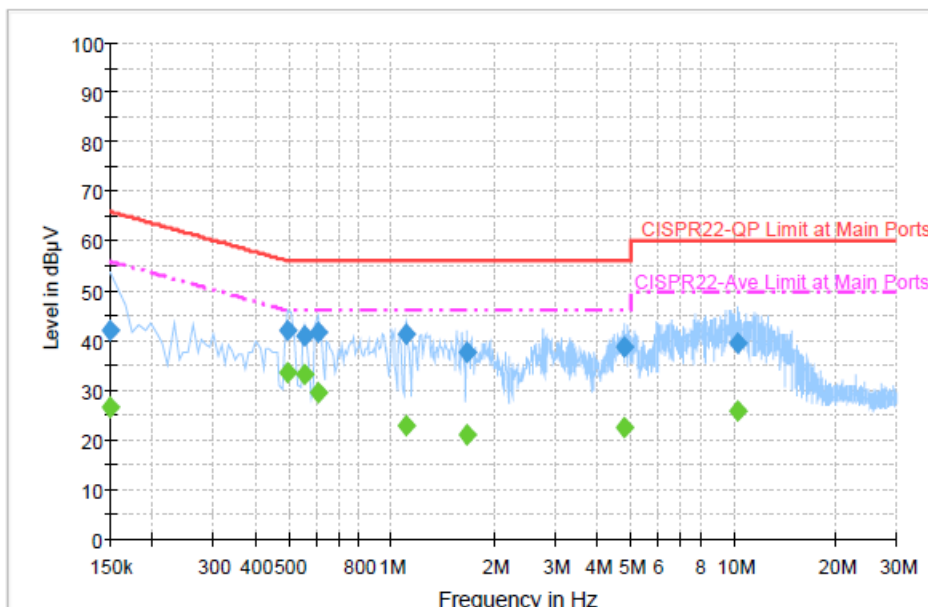
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	20~22℃
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + MP3 + USB Cable (Charging from Adapter)		



Final Result : QuasiPeak

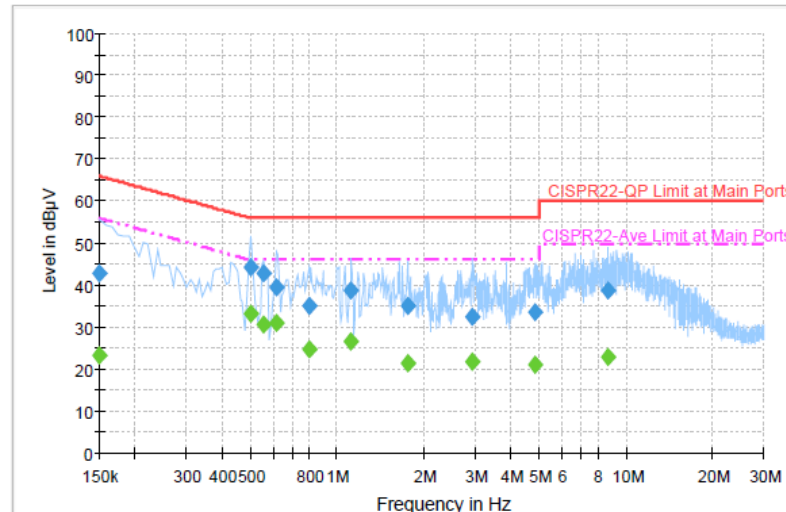
Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	41.9	Off	L1	19.3	24.1	66.0
0.494000	42.2	Off	L1	19.4	13.9	56.1
0.558000	41.1	Off	L1	19.4	14.9	56.0
0.606000	41.6	Off	L1	19.4	14.4	56.0
1.102000	41.4	Off	L1	19.4	14.6	56.0
1.654000	37.7	Off	L1	19.5	18.3	56.0
4.806000	38.7	Off	L1	19.6	17.3	56.0
10.318000	39.4	Off	L1	19.7	20.6	60.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	26.4	Off	L1	19.3	29.6	56.0
0.494000	33.6	Off	L1	19.4	12.5	46.1
0.558000	33.2	Off	L1	19.4	12.8	46.0
0.606000	29.5	Off	L1	19.4	16.5	46.0
1.102000	22.9	Off	L1	19.4	23.1	46.0
1.654000	21.0	Off	L1	19.5	25.0	46.0
4.806000	22.6	Off	L1	19.6	23.4	46.0
10.318000	25.7	Off	L1	19.7	24.3	50.0



Test Mode :	Mode 1	Temperature :	20~22℃
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + MP3 + USB Cable (Charging from Adapter)		

**Final Result : QuasiPeak**

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	42.8	Off	N	19.4	23.2	66.0
0.502000	44.4	Off	N	19.4	11.6	56.0
0.558000	42.8	Off	N	19.4	13.2	56.0
0.614000	39.7	Off	N	19.4	16.3	56.0
0.798000	35.0	Off	N	19.6	21.0	56.0
1.118000	38.8	Off	N	19.5	17.2	56.0
1.750000	35.1	Off	N	19.6	20.9	56.0
2.950000	32.3	Off	N	19.5	23.7	56.0
4.854000	33.6	Off	N	19.6	22.4	56.0
8.654000	38.7	Off	N	19.7	21.3	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	23.3	Off	N	19.4	32.7	56.0
0.502000	33.3	Off	N	19.4	12.7	46.0
0.558000	30.5	Off	N	19.4	15.5	46.0
0.614000	31.2	Off	N	19.4	14.8	46.0
0.798000	24.7	Off	N	19.6	21.3	46.0
1.118000	26.7	Off	N	19.5	19.3	46.0
1.750000	21.4	Off	N	19.6	24.6	46.0
2.950000	21.6	Off	N	19.5	24.4	46.0
4.854000	21.0	Off	N	19.6	25.0	46.0
8.654000	22.8	Off	N	19.7	27.2	50.0

3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

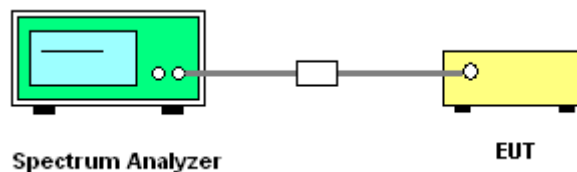
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.6.4 Test Setup





3.6.5 Test Result of Frequency Stability

Test Band :	5GHz band 1,2,3	Test Engineer :	Bill Kuo
-------------	-----------------	-----------------	----------

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.4
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	20	4.35
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.8
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	-30	3.8
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	50	3.8

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	3.4
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	4.35
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	20	3.8
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	-30	3.8
11a	6Mbps	1	64	5320	5320.050	0.050	9.40	50	3.8

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.4
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	20	4.35
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.8
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	-30	3.8
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	50	3.8

Note: Center Frequency = (Low Frequency + High Frequency) / 2.



3.7 Automatically Discontinue Transmission

3.7.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



3.8 Antenna Requirements

3.8.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2) ,if transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.8.2 Antenna Anti-Replacement Construction

Non-standard antenna connector is used.

3.8.3 Antenna Gain

The antenna gain is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 09, 2014	Jul. 25, 2014 ~ Aug. 05, 2014	Jun. 08, 2015	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	1036004	300MHz~40GHz	Aug. 17, 2013	Jul. 25, 2014 ~ Aug. 05, 2014	Aug. 16, 2014	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Aug. 17, 2013	Jul. 25, 2014 ~ Aug. 05, 2014	Aug. 16, 2014	Conducted (TH02-HY)
Spectrum Analyzer	R&S	FSP40	100055	9kHz ~ 40GHz	Jun. 09, 2014	Jul. 31, 2014 ~ Aug. 05, 2014	Jun. 08, 2015	Radiation (03CH06-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211030	9kHz ~ 26.5GHz	Dec. 02, 2013	Jul. 31, 2014 ~ Aug. 05, 2014	Dec. 01, 2014	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESVS10	834468/0003	20MHz ~ 1000MHz	May 06, 2014	Jul. 31, 2014 ~ Aug. 05, 2014	May 05, 2015	Radiation (03CH06-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	860004/0001	9kHz ~ 30MHz	Jul. 28, 2014	Jul. 31, 2014 ~ Aug. 05, 2014	Jul. 27, 2015	Radiation (03CH06-HY)
Bilog Antenna	Schaffner	CBL6112B	2885	30MHz ~ 2GHz	Oct. 10, 2013	Jul. 31, 2014 ~ Aug. 05, 2014	Oct. 09, 2014	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Jul. 24, 2014	Jul. 31, 2014 ~ Aug. 05, 2014	Jul. 23, 2015	Radiation (03CH06-HY)
Amplifier	SONOMA	310N	186713	9kHz ~ 1GHz	Apr. 16, 2014	Jul. 31, 2014 ~ Aug. 05, 2014	Apr. 15, 2015	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1865802	18GHz~40GHz	Jun. 09, 2014	Jul. 31, 2014 ~ Aug. 05, 2014	Jun. 08, 2015	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	159075	1GHz ~ 18GHz	Apr. 21, 2014	Jul. 31, 2014 ~ Aug. 05, 2014	Apr. 20, 2015	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz ~ 40GHz	Oct. 03, 2013	Jul. 31, 2014 ~ Aug. 05, 2014	Oct. 02, 2014	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A01917	1GHz ~ 26.5GHz	Apr. 10, 2014	Jul. 31, 2014 ~ Aug. 05, 2014	Apr. 09, 2015	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	Jul. 31, 2014 ~ Aug. 05, 2014	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1 m ~ 4 m	N/A	Jul. 31, 2014 ~ Aug. 05, 2014	N/A	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100356	9kHz ~ 2.75GHz	Nov. 15, 2013	Jul. 13, 2014	Nov. 14, 2014	Conduction (CO05-HY)
LISN (for auxiliary equipment)	Rohde & Schwarz	ENV216	100081	9kHz ~ 30MHz	Dec. 12, 2013	Jul. 13, 2014	Dec. 11, 2014	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz ~ 30MHz	Dec. 04, 2013	Jul. 13, 2014	Dec. 03, 2014	Conduction (CO05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 13, 2014	N/A	Conduction (CO05-HY)



5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.26
---	------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.50
---	------